

# ASTRONOMICAL CATALOG DESK REFERENCE

1994 Edition

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**ASTRONOMICAL DATA CENTER**



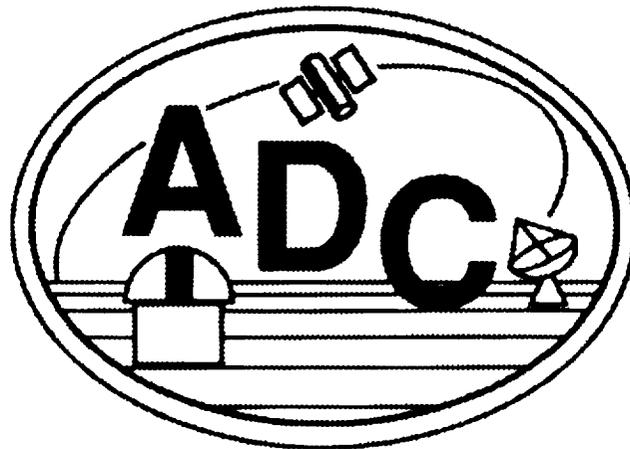
National Aeronautics and  
Space Administration

Goddard Space Flight Center



# ASTRONOMICAL CATALOG DESK REFERENCE

1994 Edition



## A Guide to Machine-Readable Catalogs at the Astronomical Data Center

National Space Science Data Center  
World Data Center A for Rockets and Satellites  
National Aeronautics and Space Administration  
Code 633  
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**Cover Photo:**

This photo of M42 was taken with the 1-meter Schmidt-Cassegrain telescope of the Fan Mountain Station of the Leander McCormick Observatory. From an original 10x10 inch plate (hypered Kodak 103a-G emulsion) made by Kerry A. Kingham. Photo provided by James E. Gass.

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# Preface

Astronomical catalogs are the compilation of much essential information obtained from the study of the original data. The catalogs themselves have been a key factor in the progress of astronomical research. The topics span the whole range of astronomical and astrophysical activities, from positional data on stars and galaxies to atomic data used in the interpretation of astronomical spectra.

The Astronomical Data Center (ADC) was created as a derivative of work begun in NASA's Laboratory for Astronomy and Solar Physics under the direction of Jaylee M. Mead to create and archive digital copies of important astronomical catalogs. In collaboration with the other astronomical data centers around the world, it has collected, and in some cases keyed in, over 700 electronic copies of astronomical catalogs in the past decade. The ADC continues to receive catalogs and distribute them. Requests for the catalogs start to arrive soon after the catalogs are received. Yet, with an ever increasing number of the catalogs available through the ADC, finding the right catalog may pose a problem for the astronomer.

Therefore, the ADC has created an on-line service that lists title, author, and, for many catalogs, a brief description. This has proved to be a very useful way to locate the catalog(s) needed by the researcher. So far, no document describing the ADC catalogs has been available in printed form. The current publication describes about one third of the most frequently requested catalogs. Future updates will extend the number of catalogs described and include new additions. Also, a hypertext document of the ADC catalog holdings will be created that will be accessible from the World Wide Web (WWW) and point to the actual catalogs.

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The preparation and production of this document required the labor of many people. The entire staff of the ADC has supported the effort. The Publications office of the National Space Science Data Center (NSSDC) provided key editorial and production support during its creation. Key individuals who contributed to this document are as follows:

## ADC Staff

- James E. Gass – document concept, overall document format, cover design, text contributions, brief descriptions, and content editing
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- David Leisawitz – brief descriptions

## NSSDC Publications Staff

- Miranda B. Knowles – editorial review, production, and printing support
- Ann M. Lipscomb – cover art, title page art, production support

## NSSDC Photo Lab

Jay S. Friedlander    - photographic reproduction

Finally, it should be noted that the ADC internal data bases, which serve as the basic input for the *Astronomical Catalog Desk Reference*, were built by staff members both past and present. Major contributions to the initial collection of catalog descriptions and documents that paved the way for this publication were made by former ADC staff members Wayne H. Warren, Jr., and Young Woon Kang. Thanks also to former ADC staff member Lee E. Brotzman for his comments and suggestions.

# Chapter 1

## How to Use This Document

The *Astronomical Catalog Desk Reference* is designed to aid astronomers in locating machine-readable catalogs in the ADC's archives. This chapter describes how to use this document to find catalogs of interest. The key reference components of this document are as follows:

- A listing of shortened titles for all catalogs available from the ADC (includes the name of the lead author and year of publication).
- Brief descriptions of over 300 astronomical catalogs.
- An index of ADC catalog numbers by subject keyword.
- An index of ADC catalog numbers by author.

The heart of this document is the set of brief descriptions generated by the ADC staff. The 1994 edition of the *Astronomical Catalog Desk Reference* contains descriptions for over one third of the catalogs in the ADC archives. Readers are encouraged to refer to this section for concise summaries of those catalogs and their contents.

### 1.1 ADC Catalog Numbers

Catalogs archived at the ADC are grouped into eight categories which follow a system used at the Centre de Données Astronomique de Strasbourg (CDS). The categories are:

- (1) Astrometric and Positional Data
- (2) Photometric Data
- (3) Spectroscopic Data
- (4) Cross Identifications
- (5) Combined and Derived Data
- (6) Miscellaneous
- (7) Nonstellar and Extended Objects
- (8) Radio Sources

Within each category a sequence number is assigned to each catalog based on when it was added to the collection and where applicable, a letter indicating the revision level. The ADC

catalog number consists of the category number followed by the sequence number. This number is used to request the catalog from the ADC. When users find a catalog of interest, they should make a note of its number.

The shortened title list and the brief descriptions in this guide are presented in order of ascending catalog number. The keyword index (Chapter 4) is arranged alphabetically by subject keyword. The author index (Chapter 5) is arranged alphabetically by author name. All author names, not just those of the lead authors appear in this index.

## **1.2 To Find a Catalog When You Know the Title**

If you are searching for a catalog of known title, you can look for it in the shortened title list. Remember that these are grouped by category. Find the category or categories that might apply and scan the list. Since the sequence numbers are assigned as the catalogs are received, more recent catalogs tend to have higher numbers while older catalogs have lower numbers. Once you find the catalog entry in the title list, note the ADC number. You may wish to check for a brief description in Chapter 3. If you do not find the catalog in the shortened title list, it was not available from the ADC at the time of publication.

## **1.3 To Find a Catalog When You Know the Author(s)**

If you know an author of a catalog, the author index in Chapter 5 will give you ADC numbers for that author's catalogs held by the ADC. If there are more than one catalog by that author, you can use the shortened title list to pinpoint the one of interest. If there are many entries for that author, use the CDS category to help limit your search. A quick check of Chapter 3 for a description of the catalog can help to confirm that it contains the information you need.

## **1.4 To Find Catalogs on a Particular Topic**

Catalogs archived at the ADC are assigned one or more keywords that describe the type of objects and/or the type of observations compiled. Scan the keywords in Chapter 4 for those that describe the type of information you need. Remember that the first digit of the catalog number indicates its category. This can help you narrow your search. If you use specific keywords as opposed to general keywords (e.g., "CN band photometry" instead of just "photometry"), you will be able to pinpoint the appropriate catalogs with less effort. You may wish to look for brief descriptions for the entries of interest before checking the short title list. These provide detailed information on the contents of the catalogs. The original source reference for each catalog is highlighted in boldface type in the brief description's reference list. If there is no brief description for a particular catalog, the ADC may have additional information available on line or in paper form.

## 1.5 To Request a Catalog from the ADC

After you have located a catalog that you want to acquire, refer to Appendix A. This appendix describes the various ways in which you can retrieve the data over the Internet automatically or by contacting the NSSDC Coordinated Request and User Support Office (CRUSO). If the ADC has only paper documentation for a catalog that you want, the paper document will be sent automatically. Note that for some of our data services handling charges may apply. Such charges depend on the medium used and whether or not you are a NASA-supported researcher.

## 1.6 If the ADC Does Not Have the Catalog You Need

The ADC exchanges copies of catalogs with its sister data centers in other parts of the world. In this way each center can serve as the primary catalog source for its region. If we do not have the catalog you need, please feel free to contact us and let us know. We routinely acquire new catalogs to meet outstanding requests. In addition, there are other institutions that hold collections of machine-readable astronomical catalogs. You may wish to contact agents at these institutions to see if they have what you need. Some of these sources are listed in Appendix D.

## 1.7 To Submit Catalogs for Archiving at the ADC

In your research you may have created a collection of data of your own that would be usable by other researchers and that you are able to organize the data in tabular form or as a collection of ASCII data files. As long as you can organize it in a way that the data files stand on their own, the ADC or NSSDC may be able to archive and distribute your data. If your data set has not been published in a major journal, we will ask you to prepare documentation that NSSDC will publish and distribute along with your data. Guidelines for submission are described in Appendix B.

## 1.8 To Contact the ADC Staff

If you have any questions about the ADC, if you wish to report errors found in catalogs, or if you wish to consult with us on other matters, refer to the contact information given in Appendix C. We depend upon feedback from those who use our services to help us improve those services. This document is the first of its kind and we are interested in hearing whether or not you find it useful. We have begun to expand our existing network services to include access via Internet systems such as WWW and Wide Area Information System (WAIS). Future versions of this document may be made on line and searchable using such tools. Please let us know if this service would be of value to you.



## Chapter 2

# ADC Catalog Holdings Short Title List

This chapter contains a complete listing of the ADC catalog holdings. The entries are in the ADC catalog number order and are grouped by category. Each ADC catalog number is followed by the catalog's status and shortened title that includes at least the lead author and year of publication.

For catalogs not having a distribution code of A, documentation is sparse or nonexistent, and a requester will often need to examine the data carefully for potential problems and inconsistencies. The ADC routinely distributes catalogs with status codes of C or D "as is". As resources permit we will attempt to check and upgrade them when requested.

### Status Codes for Catalogs

- A - Has been checked for consistency
- B - Is distributed as received
- C - Not yet checked for consistency
- D - In preparation, revision, or update
- F - Available in microfiche version
- G - Available in microform versions
- H - Documentation in hard copy form only
- M - Available in microfilm version
- N - Available via network
- O - Available on CD-ROM
- P - Available in hard copy form
- T - Full documentation available
- U - Description for machine version

**Category 1: Astrometric and Positional Data**

ADC #	Status Code	Abbreviated Catalog Title
1005	BN	Proper Motions of 20843 Cape Zone Stars 1900 (Spencer Jones+ 1936)
1006	BN	Cape 20554 Faint Stars, -40 to -52, 1900.0 (Spencer Jones+ 1939)
1011	BHN	Proper Motions of 8790 Stars with Ref to Galaxies (Klemola+ 1971)
1012	AFN	Zone Catalog, -6 to -10, Equinox 1890 (Herz 1906,1907)
1014	CN	Proper Motions of 1160 Late-Type Stars (Fogh Olsen 1970)
1016	CN	Catalog of 3356 Faint Stars, 1950 (Larink+ 1955)
1023	CN	Proper Motions for 437 A Stars (Fogh Olson 1970)
1028	CN	Bonn 10: Catalog of 10663 Stars (Kuestner 1908)
1031	BN	Bucharest KSZ Faint Stars, -11 to +11, 1950.0 (Bucharest 1972)
1033	CN	First Greenwich Catalog of Stars for 1925.0 (London 1924)
1034	CN	Second Greenwich Catalog of Stars for 1925.0 (London 1935)
1035	CN	Second 9-Year Astrographic Cat Reference Stars 1900 (London 1909)
1036	CN	Catalogue of 964 Stars, Zones +5 to +15 (Fayet)
1038	CN	Tokyo Mitaka Catalogue of Equatorial Stars 1950.0 (Tuzi 1962)
1044	BHN	Second Cat of Fundamental Stars (SPF-2; Santiago-Pulkovo unpub.)
1049	CN	Strasbourg Meridian Catalog (Strasbourg 1972)
1054	BN	1849 Stars Proper Motions Exceeding 0.5" Annually (Luyten 1955)
1055	CN	Third Toulouse Catalogue, Zones +3 to +12 (Paloque 1937)
1057	CN	D'Abbadia Catalogue of 14263 Stars, +16 to +24 (Hendaye 1915)
1059	CN	Proper Motions of 12590 Faint Stars, +25 to -20 (Gorel 1972)
1060B	BHN	Yale Catalogue Trigonometric-Parallax Data (Jenkins 1963)
1061B	AFNOT	AGK3 Catalogue (Dieckvoss, Heckmann 1975)
1062C	ANT	Perth 70 B: Positions 24900 Stars (Hog, von der Heide 1976)
1068A	BN	Positions, Proper Mot 1981 Stars Near Alpha Per (Fresneau 1980)
1069	ANT	AGK3 Catalogue by Right Ascension (Dieckvoss, Heckmann 1975)
1071	AFHNT	Bonner Durchmusterung Supplemental Stars (Warren, Kress 1980)
1073B	AHNT	Sydney Photographic Cat 20457 Stars, -48 to -54 (Eichhorn+ 1983)
1074	BHN	Fourth Besancon Observatory Meridian Catalogue (Creze+ 1982)
1075	BHN	Second Cape Photographic Catalogue, 1950.0 (Cape Observatory 1968)
1078	AFHNT	Third Santiago-Pulkovo Fund Stars, +40 to -90 (SPF-3; Loyola+ 1972)
1079	AFNOT	Lowell Proper Motion Survey 8991 Stars Northern Hem (Giclas 1971)
1080	AFNT	Catalog of 5268 Standard Stars, Normal System N30 (Morgan 1952)
1081	AHNT	Yale Catalogue of Trigonometric Parallaxes / Suppl (USNO 1982)
1082	AHNT	First Santiago-Pulkovo Fundamental Stars (SPF-1; Anguita+ 1975)
1085	AN	Cape Photographic Catalogue 2 (CPC 2; Nicholson+ 1984)
1086A	AHNT	Sydney Southern Star Catalogue (King, Lomb 1983)
1087	BHN	Luyten Half-Second Catalogue, Second Edition (LHS; Luyten 1979)
1089	AHNT	Santiago 67 Cat, 7610 Stars, -25 to -45, 1950.0 (Carrasco+ 1981)
1090	AHNT	Positions of 502 Stars in Pleiades Region (Eichhorn+ 1970)

ADC #	Status Code	Abbreviated Catalog Title
1091	AH	JPL Long Ephemeris DE102, 1410 BC - 3003 AD, B1950 (Newhall+ 1976)
1092	AHNT	Yale Zone Catalogue, -60 to -70 Degrees (Fallon 1983)
1093A	ANOT	JPL Ephemeris DE118/LE62, 1960-2030, B1950 (Standish 1981,1990)
1094A	ANOT	JPL Ephemeris DE200/LE200, 1960-2025, J2000 (Standish+ 1981,1990)
1095	D	J Cat of Reduced Astrographic Data Selected Areas (Dunham+ 1982)
1096	ANT	Astrographic Catalogue, +01 to +31 Degrees (Fresneau 1983)
1097	ANOT	Perth 75, Positions of 2589 FK4/FK4S Stars (Nikoloff, Hog 1982)
1098A	AFNOT	NLTT Published Edition (Luyten 1979-1980)
1099	BHN	Brorfelde Meridian Catalogues 1964-1976 (Brorfelde Obs. 1968-1984)
1107	ANOU	Washington Cat Visual Double Stars 1984.0 (Worley, Douglass 1984)
1108	AFNPT	Cape Photographic Durchmusterung (CPD; Gill, Kapteyn 1895-1900)
1110	BHN	Occultation Double-Star Observations (Evans 1983)
1112	AHNT	Lowell Proper Motion Survey Southern Hemisphere (Giclas+ 1978)
1113A	ANT	General Cat of 33342 Stars, 1950.0 (GC; Boss 1937, ADC 1992)
1114	AFNPT	Cordoba Durchmusterung (Thome 1892-1932)
1115	B	Uranus-Voyager Reference Star Catalogue (Klemola, Owen 1985)
1116	AN	Cape Photographic Cat, 1950.0 (CPC; Jackson+ 1954-1958, ADC 1985)
1118	BN	Elements of Minor Planets for 1986 (Batrakov 1985)
1119	AGNPT	Southern Durchmusterung (Schoenfeld 1886)
1121	BN	Common Proper Motion Stars in the AGK3 (Halbwachs 1986)
1122	AGNPT	Bonner Durchmusterung (BD; Argelander 1859-62, Kuestner 1903)
1123	AHN	Lunar Occultations of IRAS Point Sources, 1986-1990 (Simon+ 1986)
1124	BN	Elements of Minor Planets for 1987 (Batrakov, Shor 1986)
1125	D	Combined Lick-Voyager Reference Star Catalogue (Dunham 1989)
1126	BHN	Carlsberg Meridian La Palma (Copenhagen & Royal Greenwich Obs 1986)
1127	BN	Elements of Minor Planets for 1988 (Batrakov 1987)
1128	BHN	Photographic Obs Visual Double Stars (van Albada-van Dien+ 1987)
1129	BN	Trig Parallax and Proper Motion Survey UK Schmidt (Murray+ 1986)
1131A	ANOT	SAO Star Catalog J2000 (SAO Staff 1966; USNO, ADC 1990)
1134	BN	A New List of Trapezium-Type Multiple Systems (Salukvadze 1978)
1135	BN	Multiple and Double Stars in T Associations (Salukvadze 1980)
1136	BN	Trapezium-Type Multiple Sys in T Associations (Salukvadze 1980)
1137	BN	Positions, Proper Motions of 4949 Geodetic Stars (Khrutskaya 1984)
1138	ANU	Southern Reference Star Cat of 20488 Positions (SRS; Smith+ 1988)
1140	AN	Neptune-Voyager Reference Star Catalogue (Klemola, Owen 1986)
1141	ANOT	Yale Zone Catalogues Integrated (Yale Univ 1939-1983; ADC 1989)

ADC #	Status Code	Abbreviated Catalog Title
1142	AHN	Lunar Occultations of IRAS Point Sources 1991-2000 (Simon+ 1989)
1143	ANOT	Fourth Fundamental Cat and Suppl (FK4, FK4S; Fricke, Kopff 1963)
1144	BN	First, Second and Third Herstmonceux Cats, 1950.0 (Tucker+ 1983)
1145	BHN	Orbital Elements of 3936 Minor Planets (Batrakov, Shor 1989)
1146	ANOU	Positions and Proper Motions (Roeser, Bastian 1988)
1147	BHN	Carlsberg Meridian Catalogue, La Palma (Copenhagen U Obs+ 1989)
1148	BN	Fourth Melbourne General Catalogue (Me4; Melbourne Obs unpub.)
1149A	AHNT	Fifth Fundamental Catalogue, Basic Fund Stars (FK5; Fricke+ 1988)
1150	BN	Proper Motions for High Luminosity Stars (Valitova 1990)
1151	BN	Precise Radio Source Positions from Mark III VLBI (Ma+ 1990)
1152	AHNT	Jupiter-Voyager Reference Star Catalogue (Klemola+ 1978)
1153	AHNT	Saturn-Voyager Reference Star Catalogue (Klemola+ 1979)
1154	AN	Astrographic Catalogue, Zones -02 to +31 (AC; Roeser 1990)
1155	AN	Astrographic Catalogue, Zones -02 to +31, X,Y Data (AC; ARI 1989)
1156	D	Melbourne General Catalogues 1-5 (Ellery+ 1874, 1889, 1917)
1157	AHNT	U.S. Naval Observatory Zodiacal Zone Catalog (ZZCAT; USNO 1990)
1158	D	Standard Astrometric Region in Praesepe (Russell 1976)
1159A	ANOU	Positions and Proper Motions - South, Preliminary (Bastian+ 1990)
1162	B	Zodiacal Catalog, Version XZ80J (Schmidt+ 1979)
1163	BN	U.S. Naval Observatory Pleiades Catalog (Van Flandern 1969)
1164	BN	U.S. Naval Observatory K Catalog (Dunham 1978)
1165	D	U.S. Naval Observatory L Catalog (Dunham 1989)
1166	D	Combined Catalog for Occultation Searches (Dunham 1988)
1167	ANU	Tokyo Photoelectric Meridian Circle Catalog 1986 (Yoshizawa+ 1989)
1168	BN	Perth 83 Catalogue of 12263 Stars (Harwood 1990)
1169	AHNT	Selected Compact Radio Sources (Argue+ 1984)
1170A	BHN	Carlsberg Meridian Catalogue, La Palma (Copenhagen U. Obs.+ 1991)
1171	ANOT	Astrographic Catalog Reference Stars (Corbin,Urban 1991)
1172	ANOT	International Reference Stars (Corbin 1991)
1174	ANOU	Yale Trigonometric Parallaxes Preliminary (van Altena, W.F.+ 1991)
1175	ANT	Fifth Fundamental Catalogue, FK5 Extension (Fricke+ 1991)
1176	ANU	AGK3U (Bucciarelli+ 1992)
1177	ANU	Catalogue of Proper Motions in NGC 752 (Platais 1992)
1178	ANU	Catalogue of Proper Motions in NGC 7209 (Platais 1992)
1179	ANU	Chinese Geodetical Stars Catalogue (CGSC; 1992)
1180	ANU	General Catalogue of Stars (GCPA; 1992)
1181	AN	Second General Catalogue of Stars (GCPA2; Lu 1992)
1182	ANU	Fourth Preliminary Catalogue of Stars (PACP4; Lu 1992)
1183B	BNU	Orbital Elements of 4265 Minor Planets (Batrakov, Shor 1992)
1184C	BNU	Orbital Elements of 4646 Minor Planets (Batrakov, Shor 1992)

ADC #	Status Code	Abbreviated Catalog Title
1185	ANU	Giant Branch of the Fornax Dwarf Spheroidal Galaxy (Sagar+ 1990)
1186	ANU	Tokyo PMC Catalog 85 (Yoshizawa+ 1987)
1187	ANU	Tokyo PMC Catalog 87 (Yoshizawa, Suzuki 1991)
1188	ANU	Tokyo PMC Catalog 88 (Yoshizawa+ 1992)
1189	BNU	Carlsberg Meridian Catalog, La Palma (Copenhagen U Obs+ 1992)
1191	BNU	Hipparcos Input Catalogue (Turon+ 1992)
1192	ANU	Astrometric Std Region Near NGP: Cat of 3196 Stars (Pakulyak 1992)
1193	BN	Positions and Proper Motions - South (Bastian+ 1992)
1194	BN	Bright Stars Supplement, PPM and PPM South Star Cat (Bastian+ 1992)
1195	BNU	FOCAT-S Photographic Catalogue (Yagudin 1993)
1196	BNU	Hipparcos Input Catalogue, Version 2 (Turon+ 1993)
1197	BNU	Tycho Input Catalogue (Egret+ 1992)
1199	ANT	Lick Northern Proper Motion Program: NPM1 Catalog (Klemola+ 1993)
1200	ANT	Lick Northern Proper Motion Pgm: NPM1 Reference Galaxies (Klemola+ 1993)
1903	D	Stars, Region of Hyades Cluster (Warren,Dunham 1980)
1916	C	Perth 70, Individual Observations of 24900 Stars (Hog+ 1976)
1917	AHNT	Perth 70 B: Ordered by DM Number (Hog, von der Heide 1976)

## Category 2: Photometric Data

ADC #	Status Code	Abbreviated Catalog Title
2002B	ANOT	Two-Micron Sky Survey (TMSS; Neugebauer, Leighton 1969)
2004	AHMN	Photoelectric Cat: UBV, UcbV Mags and Colors (Ochsenbein 1974)
2005	BHN	UBV Photometry of Bright Stars (Johnson+ 1966)
2006	C	Telescope Catalogue of Ultraviolet Magnitudes (Davis+ 1973)
2007A	ANOT	UBVRIJKLMNH Photoelectric Photometric Cat (Morel, Magnenat 1978)
2008	BHN	UVBGRI Photometric Catalogue (Nicollier, Hauck 1978)
2015	CN	Photometric Measurements in the UBVR 20 System (Magnenat 1973)
2017A	AHN	Photometric Measurements, David Dunlap Obs System (Magnenat 1974)
2018	CN	Photometric Measurements, Eggen (102,65,62) System (Magnenat 1974)
2019	CN	Theoretical Colours for F and G Dwarfs (Bell 1971)

ADC #	Status Code	Abbreviated Catalog Title
2020	CN	Magnitudes and Colours of O & B Stars in Vela (Denoyelle 1974)
2021A	AHNT	Narrow-Band Photometry of Late-Type Stars (Haeggkvist, Oja 1970)
2022	CN	H-Alpha Phot Late-Type Stars II, Southern F & G Dwarfs (Peat 1966)
2024	CN	H-Alpha Phot Late-Type Stars I, Northern F, G, K Stars (Peat 1964)
2025	CN	Photometry Orange-Red Ca I Triplet in Late-Type Stars (Peat 1964)
2026A	AHNT	Early-Type Stars Measured in Narrow-Band System (Morguleff+ 1975)
2027	BHN	Photoelectric Photometric Measurements, UcbV System (Nicolet 1975)
2033	BHN	uvby, Beta Phot for Bright O-G0 Stars S of +10 (Gronbech+ 1976-1977)
2034	BN	Polarization Catalogue (Mathewson+ 1978; Klare+ 1978)
2036	AHNT	UBV, uvby-Beta Obs in Orion OB 1 Association (Warren, Hesser 1977)
2037	BHN	UBV HR Diagrams of Globular Clusters (Philip, Cullen, White 1976)
2038	BHN	Miniphote Catalogue (Magenat 1975)
2039	BHN	Stars Photometrically Measured (Magenat 1976)
2040	CN	Hydrogen-Line Absorption in Early-Type Stars (Bappu+ 1962)
2041	CN	4200-A CN Band and G Band in G8-K5 Spectra (Griffen, Redman 1960)
2042	CN	K-Line Photometry of A Stars (Henry 1969)
2043	BN	K-Line Photometry of Southern A Stars, Table I (Henry+ 1971)
2044	CN	K-Line Photometry of Stars in Population I Clusters (Hesser+ 1971)
2045	CN	Strong Cyanogen Stars, Table 2: Photometry (Janes, McClure 1971)
2046	CN	Strong Cyanogen Stars, Table 1, Table 4 (McClure 1970)
2047	CN	Scanner Abundance Studies I, Super-Metallicity (Spinrad+ 1969)
2048	CHN	A Reference List for the UBV System (Nicolet 1976)
2050	CN	Photometric Standard Stars, Magnitudes, Colours (Cousins 1971)
2051	AHN	Homogeneous Measurements in the UBV System (Nicolet 1978)
2053	AHNT	10-Micrometer Celestial Objects (Hall 1974)
2055	AHNT	Flare Stars Gershberg (Shakhovskaya 1971)
2056	AHNT	100-Micron Survey of the Galactic Plane (Hoffman+ 1971)
2059B	ANOT	Stellar Ultraviolet Fluxes, SKYSCAN/TD-1 (Thompson+ 1978)
2061	BHN	Stellar Diameters (Fracassini, Pasinetti 1979)
2062	BHN	Extinction Data (Neckel, Klare, Sarcander 1980)
2063	BN	Balmer Lines Photometric Data (J. Mermilliod, M. Mermilliod 1980)
2065	BHN	Five-Color Phot Blue Stars in Magellanic Clouds (Wamsteker 1980)
2066	BHN	Observations in H-Alpha (Ducati 1981)
2067	AHNT	OA0-2 Ultraviolet Photometry, Stellar Spectra (Code, Meade 1978)
2068	ANOT	Dearborn Observatory Catalogue of Faint Red Stars (Lee+ 1943-1947)
2072	BHN	Stars Measured in Geneva Photometric System, 3 (Rufener 1981)
2073	BN	Narrow-Band Photometry (Alexander 1981)
2074	ANOT	Photometric Data for the Nearby Stars (Hauck, Mermilliod 1981)

ADC #	Status Code	Abbreviated Catalog Title
2075	BN	Homogeneous Red, Infrared Mags on Kron System (Jasniewicz 1982)
2076A	AHNT	General Cat O Stars, Spectroscopic and Photometric Data (Goy 1980)
2077	AHNT	Non-Solar X-Ray Measurements (Arens, Rothschild 1975)
2078	BHN	uvby-Beta Phot 398 Members of Visual Multiple Systems (Olsen 1982)
2080	AFNT	Homogeneous Photometry Bright Stars on DDO System (McClure+ 1981)
2082	ANT	Galactic O-Type Stars (Garmany, Conti, Chiosi 1982)
2083	AHNT	OA0 2 Ultraviolet Filter Photometry for 531 Stars (Code+ 1980)
2084	AFNOT	13-Color Photometry of 1380 Bright Stars (Johnson, Mitchell 1975)
2085	ANT	Absolute Calibration of Stellar Spectrophotometry (Johnson 1980)
2086	ANO	Ultraviolet Bright-Star Spectrophot Suppl (Macau-Hercot+ 1978)
2087	BHN	Photographic Mags for Stars at High Galactic Lat (Weistrop 1983)
2088B	BHN	uvby-Beta Data for Local Interstellar Reddening Map (Perry+ 1982)
2090	AHNT	Four-Colour uvby and H-Beta Phot A5-G0 Stars < 8.3 mag. (Olsen 1983)
2091	ANU	Intrinsic Colours of Stars in the Ultraviolet (Carnochan 1982)
2092	AFNOT	Revised S201 Catalog of Far-Ultraviolet Objects (Page+ 1982)
2093	ANU	Vilnius Photoelectric Catalogue (Zdanavicius 1983)
2094	ANOT	Revised AFGL Infrared Sky Survey and Suppl (Price, Murdock 1983)
2095	BHN	Stellar Component of the Galaxy, AFGL IR Survey (Grasdalen 1983)
2096	AHNT	Interim Equatorial Infrared Catalogue (EIC-1; Sweeney+ 1978)
2097	ANOT	ANS Ultraviolet Photometry Cat of Point Sources (Wesselius+ 1982)
2100	AHNT	H-Beta Photometry of Southern A5-G0 Stars < 8.3 mag (Olsen+ 1984)
2101	BN	Photoelectric Mags/Colors Visual Multiple Sys (Wallenquist 1981)
2103	BHN	Revised Supernova Catalogue (Barbon+ 1984)
2104	AHNT	Photographic UBV Photometry, Open Clusters (Mermilliod 1984)
2106	AHNT	Search for Ultraviolet-Excess Objects (Noguchi+ 1980; Kondo+ 1984)
2108	AHN	Two-Micron Sky Survey, Nearest SAO Stars on POSS (Nagy 1983)
2109	BN	Vilnius Photometric Catalogue (North 1984)
2111	BHN	Faint Blue Stars at High Galactic Latitude. III (Berger+ 1984)
2114	AHNT	UV Interstellar Extinction Excesses for 1415 Stars (Savage+ 1985)
2115	ANT	Faint Blue Objects at High Galactic Latitude (Warnock+ 1984)
2116	ANOT	Photoelectric Photometric Cat, Johnson UBVRI System (Lanz 1986)
2117	AHN	Concentric Aperture UBVRI Phot, Globular Clusters (Peterson 1986)
2118	ANOT	UBVRI Photometric Standard Stars, Celestial Equator (Landolt 1983)
2119	ANU	Stellar Distribution, South Gal Pole, Ptg V and B-V (Bok+ 1984)
2120	ANU	Phot and Spectrophot Investigation, South Gal Pole (Eriksson 1978)
2121	ANU	Stellar Distribution Near SA 127, SA 141, SA 189 (Ratnatunga 1983)
2122A	ANOT	UBV Photoelectric Photometry Catalogue (Mermilliod 1986)
2123A	AHNT	UBV Photometry of Faint Stars ( $V > 14.5$ ) in M67 (Frolov+ 1986)

ADC #	Status Code	Abbreviated Catalog Title
2124A	ANOT	UBV Phot and MK Spectral Types in Open Clusters (Mermilliod 1986)
2125	AFNOT	IRAS Catalog of Point Sources, Version 2.0 (IPAC 1986)
2126	AFNOT	IRAS Serendipitous Survey Catalog (IPAC 1986)
2127	BHN	Visual Double Stars with Early-Type Primaries. IV (Lindroos 1985)
2128	BHN	Photometric Data for the Bright Stars (Hauck, Mermilliod 1986)
2129	BHN	Stars Emitting Radio Continuum (Wendker 1978)
2130	BHN	2-D Classification, Vilnius Photometry M56 Region (Smriglio+ 1986)
2131	BN	Tonantzintla Pleiades Flare Stars (Haro, Chavira, Gonzalez 1982)
2132	BN	Photographic, Photovisual and Photored Mags, SA 40 (Kolesnik 1987)
2133	BN	Photoelectric UBV Colours of Supernovae (Younger+ 1985)
2134	BHN	Magnetic Field Measurements (Didelon 1983)
2135	BN	Suppl to Diffuse Interstellar Band Measurements (Guarinos 1988)
2136	ANO	Catalog of Infrared Observations (CIO; Gezari, Schmitz, Mead 1987)
2138	BNU	Bright ubvy-beta Standard Stars (Perry, Olsen, Crawford 1987)
2139	ANOT	General Cat of Variable Stars, 4th Edition (GCVS4; Kholopov+ 1988)
2140	ANOT	New Catalogue of Suspected Variable Stars (NSV; Kukarkin+ 1982)
2141	D	Predicted K Mags of Stars, South of -33, North of +81 (Kuan 1988)
2143	ANOU	HST Guide Star Photometric Catalog (Lasker+ 1988)
2144	ANU	Brightest Stars in the Field of M31 (Berkhuijsen+ 1988)
2145	ANU	Brightest Stars in a Foreground Field of M31 (Berkhuijsen+ 1990)
2146	BHN	Observations of the Ap Star HR 1217 from 1980-86 (Kurtz 1989)
2147	BN	Radio Stars (Wendker 1987)
2148	AU	IRAS Chopped Photometric Channel Observations (Wesselius 1989)
2149	BN	Diffuse Interstellar Band Measurements (Snow, York, Weltz 1977)
2150	BHN	Parameters for Eclipsing Binaries (Brancewicz, Dworak 1980)
2151	BHN	Observations of Variable Stars (Feijth, Jurriens 1986)
2152	D	UBV Photometry of 1690 High-Proper-Motion Stars (Sandage+ 1986)
2154	ANU	Individual UBV Observations of LSS Stars (Drilling 1989)
2155	BN	Apparent Diameters and Absolute Radii of Stars (Fracassini+ 1988)
2156A	ANOT	IRAS Faint Source Catalog, $ b  > 10$ , Version 2.0 (Moshir+ 1989)
2157	BN	Photoelectric Photometry in the Vilnius System (Straizys+ 1989)
2158A	ANOT	uvby, beta Photoelectric Photometric Cat (Hauck, Mermilliod 1990)
2159	BN	Asiago Supernova Catalog (Barbon+ 1989)
2160	AHN	HST Colour System Isochrones (Edvardsson, Bell 1989)
2161	AN	Equatorial Infrared Catalog (Sweeney, Richardson 1990)
2162	D	Scanned CCD Search Crux/Centaurus (Caldwell+ 1991)
2163	BN	Up-to-Date Walraven VBLUW Photoelectric (Nitschelm, Mermilliod 1990)
2164	BN	DDO Photoelectric Photometric Cat (Mermilliod, Nitschelm 1989)
2165	BN	ubvy (Eggen) Photometry (Nitschelm, Mermilliod 1990)

ADC #	Status Code	Abbreviated Catalog Title
2166	BN	Washington CMT1T2V Photometric Cat (Mermilliod, Nitschelm 1990)
2167	ANU	General Catalogue of Photometric Data (Hauck+ 1990)
2168	ANOT	Homogeneous Means in the UBV System (Mermilliod 1991)
2169	ANOT	Geneva Photometric 4 (Rufener 1988)
2170	AN	Long-Term Photometry of Variables at ESO. I. (Manfroid+ 1991)
2171	AN	Parenago Cat of Stars in Orion Neb (Parenago 1954, Malkov 1992)
2172	ANU	Gen Cat of Variable Stars, 4th Ed (GCVS4; Kholopov+ 1990,1992)
2173	BNU	A Reference Catalogue of Galactic Novae (Duerbeck 1988)
2174	AN	IRAS 2Jy Redshift Survey (Strauss+ 1992)
2175	AN	Catalogue of 166 Ultraviolet Extinction Curves (Krelowski+ 1992)
2176	BNU	Sternberg Astronomical Institute Supernovae Catalogue (Tsvetkov+ 1993)
2177	BNU	Near IR Photometry of a Sample of IRAS Point Sources (Fouque+ 1992)
2178	ANT	Cat Linear Polarization Measurements 5070 Stars (Axon+Ellis 1976)
2180	BNU	uvby-beta Phot Hi-Vel and Metal-Poor Stars (Schuster, Nissen 1989)
2181	ANT	Atlas and Cat IR Sources in the Magellanic Clouds (Schwering+ 1990)
2183	BN	UBVRI Photometric Stars Mag Range $11.5 < V < 16.0$ (Landolt 1992)
2901	AGHNT	Stromgren-Perry uvby Colors (Stromgren, Perry 1965, unpub)

### Category 3: Spectroscopic Data

ADC #	Status Code	Abbreviated Catalog Title
3002	BHN	Preliminary General Cat Early-Type Emission Stars (Bertiau+ 1969)
3004B	D	Bibliography of Stellar Radial Velocities (Abt, Biggs 1972)
3005A	AN	Faint OB Stars between Carina and Centaurus (Lynga 1968)
3006A	AN	Milky Way Studies, Centaurus to Norma. III. OB Stars (Lynga 1964)
3007A	AN	Survey of Faint OB Stars in Carina (Graham, Lynga 1965)
3009A	ANU	F2-G5 Stars in a North Galactic Pole Region (Ungren 1963)
3010A	ANU	G5 and Later Stars in a North Galactic Pole Region (Ungren 1962)
3011A	ANU	F2 and Earlier Stars in SA28, 54, 106, 107 (Ungren, Staron 1969)
3012A	ANU	F5 and Later Stars in SA28, 54, 106, 107 (Ungren, Staron 1970)
3013	BN	Vysotsky's Catalogues 1950.0 (Vysotsky+ 1943,46,52,56,58)
3014A	AHNT	F2 and Earlier Stars, North Galactic Pole Region (Slettebak+ 1959)
3017B	ANOT	Early-Type Emission-Line Stars (Wackerling 1970)
3018B	AGNOT	Stellar Spectra Classified in Morgan-Keenan System (Jaschek+ 1964)
3021	AGNOT	General Catalogue of Stellar Radial Velocities (Wilson 1953)
3022	BHN	Rotation of Evolving A and F Stars (Danziger, Faber 1972)

ADC #	Status Code	Abbreviated Catalog Title
3023B	AHNT	MK Classification for OB Stars (Lesh 1968)
3025	BH	Abundances of Na, Mg, and Ca in K Giants, Table I (Peat+ 1968)
3026	CN	Abundances of Na, Mg, and Ca in K Giants, Table II (Peat+ 1968)
3027	BN	Scanner Abundance Studies II. Raw Data (Taylor 1970)
3028	BN	Scanner Abundance Studies II. Blocking Fractions (Taylor 1970)
3029B	AGHN	H Gamma Measures of R. M. Petrie (Crampton, Leir, Younger 1973)
3030A	AGHNT	Stellar Rotational Velocities (Bernacca, Perinotto 1970-1973)
3031B	ANOT	Michigan 2-D MK Types for the HD Stars 1 (Houk, Cowley 1975)
3033	BHN	Spectral Survey of the Southern Milky Way I (Sundman+ 1974)
3034	BHN	Spectral Survey of the Southern Milky Way II (Nordstroem 1975)
3035	BH	Spectral Survey of the Southern Milky Way III (Loden+ 1976)
3036A	AHNT	Cool Carbon Stars (Stephenson 1973)
3039A	ANOT	Ultraviolet Bright Star Spectrophotometric Catalogue (Jamar+ 1976)
3040	CN	Spectral Survey Southern Milky Way Uniform (Andersen 1977)
3042	AFHN	Selected Spectral Types in the MK System (M. Jaschek 1978)
3043	BHN	Luminous Stars Southern Milky Way (Stephenson 1971; updated 1978)
3044	C	Atlas of Stellar Spectra (Johnson 1977-1978)
3045	C	Infrared Spectra for 32 Stars (Johnson, Mendez 1970)
3046	BN	Ap and Am Stars (Bertaud+ 1974; Bidelman+ 1973)
3047B	AHNT	Stellar Radial Velocities 0-20 hrs (Evans 1967)
3048B	AHNT	Spectrophotometric Scans (Breger 1976)
3049	AHNT	White Dwarfs, Selected Data (Luyten 1970)
3051B	ANOT	Michigan 2-D MK Types for the HD Stars 2 (Houk 1978)
3053	BN	Stars Classified from S2/68 UV Line Features (Cucchiario+ 1979)
3055	BN	Radial Velocities in Open Clusters (Mermilliod 1979)
3058	BN	Chemical Elements in Peculiar Stellar Spectra (Levato+ 1979)
3059	BN	Catalogue and Bibliography of Mn-Hg Stars (Schneider 1981)
3060	ANOT	General Catalogue of S Stars (Stephenson 1976)
3063B	ANOT	Revised Cat Stellar Rotational Velocities (Uesugi, Fukuda 1982)
3064	BN	Blue Objects at High Galactic Latitudes (Berger+ 1977,1980)
3067A	ANOT	Be Stars (Jaschek, Egret 1982)
3068	BN	List of Early-Type Chemically Peculiar Stars (Egret, Jaschek 1981)
3069A	D	Stellar Spectrophotometric Data (Ardeberg+ 1980)
3073	BN	Cool Carbon Stars Found with Baldone Schmidt Tel (Alksne+ 1980)
3074	BN	Faint Blue Stars near the South Galactic Pole (Haro, Luyten 1962)
3075	BN	MK Classification for HD Stars, +25 to +30 (Jensen 1983)
3076	ANOT	Luminous Stars in the Northern Milky Way (LS; Hardorp+ 1959-1965)
3077	ANT	Copernicus 0.2-A Resolution Far-UV Stellar Spectra (Snow+ 1977)
3078	AFNOT	MK Classification Extension (Morris-Kennedy 1983)
3079A	AHNT	Atlas of Spectrum of Gamma Tauri, 5186-8700 A (Applequist+ 1983)

ADC #	Status Code	Abbreviated Catalog Title
3080	ANOT	Michigan 2-D MK Types for the HD Stars 3 (Houk 1982)
3083	ANO	IUE Low-Dispersion Spectra Ref Atlas I, Normal Stars (Heck+ 1984)
3084B	AHNT	Galactic O Stars (Cruz-Gonzalez+ 1974)
3085	AHNT	Sixth Catalogue of Galactic Wolf-Rayet Stars (van der Hucht+ 1981)
3086	AHNT	SKYLAB S-019 Far-UV Objective-Prism Spectrophot (Henize+ 1979)
3087	D	Southern, Red Obj-Prism, H-alpha Emission Stars (MacConnell 1981)
3088	ANOT	Stellar Spectrophotometric Atlas 3130-10800 A (Gunn, Stryker 1983)
3089	ANOT	Stellar Spectrophotometry (Adelman+ 1989)
3090	AGHNT	Rotational Velocities (Boyarchuk, Kopylov 1964)
3092	ANOT	A Library of Stellar Spectra (Jacoby, Hunter, Christian 1984)
3095	BHN	The Interstellar 2200-A Band: Equivalent Widths (Guertler+ 1982)
3096A	ANOT	[Fe/H] Determinations (Cayrel de Strobel+ 1985)
3097A	ANU	Bib Radial Velocities for Stars in Open Clusters (Mermilliod 1984)
3101	D	Radial-Velocity and Positions from Obj-Prism Plates (Stock 1983)
3105	AHNT	Radial Velocities of Southern Stars with CORAVEL (Andersen+ 1985)
3106	BHN	Visual Multiples. VII. MK Classifications (Abt 1981)
3107	BHN	Third Catalog of Am Stars with Known Spectral Types (Hauck 1986)
3109	D	Spectrophotometry of Nova Cygni 1975 (Ferland+ 1986)
3110	ANOU	Spectrum and Magnitude Data Bank of Be, Bp, Bpe Stars (Page 1984)
3111	BHN	LMC Stellar Content III. Sp Types, V Magnitudes (Rousseau+ 1978)
3112	BHN	Spectral, Luminosity Classes, Kapteyn Areas NN2-43 (Bartaya 1979)
3113	AHNT	Deep Objective-Prism Survey for LMC Members (Sanduleak 1969)
3114	AHNT	Spectra of Late-Type Standards, 2.0-2.5 Microns (Kleinmann+ 1986)
3115	ANOT	IUE Atlas of O-Type Stellar Spectra, 1200-1900 A (Walborn+ 1985)
3116	ANOT	Spectrophotometric Standards (Massey+ 1988)
3118	BN	Bibliographical Cat Stellar Radial Velocities (Barbier+ 1987)
3119	BHN	Kuiper's Spectral Classifications Prop-Mot Stars (Bidelman+ 1985)
3120	BHN	Stars with Ca II H and K Emissions (Glebocki+ 1980)
3121	BHN	Stellar Abundances (Marecki, Strobel, Strobel 1986)
3122	BHN	Interstellar 217-nm Band: Equivalent Widths 3 (Friedemann+ 1987)
3123	BHN	Dwarf K and M Stars of Small Proper Motion (Stephenson 1986)
3124	BHN	Spectrophotometry of Bright F, G, K, and M Stars. I (Kiehling 1987)
3125	BN	Metal-Deficient F-M Stars. I. (Bartkevicius 1984)
3126	BN	Stellar Spectrophotometric Catalogue (Burnashev 1985)
3127	AHNT	Radial Velocities of Bright Southern Stars (Andersen+ 1983-1985)
3129	ANOT	Spectroscopically Identified White Dwarfs 3 (McCook, Sion 1987)
3130	BN	Wavelength Dependence of Galactic UV Extinction (Aiello+ 1988)
3131	BN	Spectroscopic Stellar Abundance Analyses (Koeppen 1988)
3133	ANOT	Michigan 2-D MK Types for the HD Stars 4 (Houk, Smith-Moore 1988)
3134	AHNT	Radial Velocities of Bright Population II F Stars (Andersen+ 1985)

ADC #	Status Code	Abbreviated Catalog Title
3135	ANOT	Henry Draper Catalogue and Extension (Cannon+ 1918-1924; ADC 1989)
3136	AHNT	Optical Spectrophotometry Wolf-Rayet C and O Stars (Torres+ 1987)
3137	D	Spectroscopically Identified Hot Subdwarf Stars (Kilkenny+ 1988)
3138	AN	Henry Draper Extension 2 (Cannon+ 1949; ADC 1989)
3139A	ANU	Equivalent Width Measures (Luck 1990)
3140	BN	Cool Carbon Stars Found with Baldone Schmidt Tel (Alksne+ 1987)
3141	BHN	Rates of Mass Loss (de Jager+ 1988)
3143	AHNT	Spectrophotometry of Wolf-Rayet Stars (Torres-Dodgen+ 1988)
3144	AHNT	Radial Velocities for 889 High-Proper-Motion Stars (Fouts+ 1986)
3145	D	U,V,W Velocity Components for the Old Disk (Sandage+ 1987)
3146	BN	IRAS Point Sources, 12-um Flux > 25-um Flux (MacConnell 1989)
3147	BN	Studies of the LMC Stellar Content (Rousseau+ 1978)
3148	BN	Interstellar Lines Catalogue (Garcia 1989)
3149	BHN	MK Standard Stars (Garcia 1989)
3150	ANU	Perkins Revised MK Types for the Cooler Stars (Keenan+ 1989)
3151	D	UBV K Stars South Galactic Pole (Kuijken, Gilmore 1989)
3152	BN	Observed Periods of Ap Stars (Catalano, Renson 1984)
3153	AHNT	Atlas of Stellar Spectra, 2.00-2.45 microns (Arnaud+ 1989)
3154	BN	Radial Vel Three Fields Along Southern Gal Equator (Denoyelle 1987)
3155	ANU	Second Henry Draper Extension: Types, Positions 10639 Stars (ARI 1991)
3156	ANOU	Cool Galactic Carbon Stars, 2nd Edition (Stephenson 1989)
3157	ANU	UV Atlas of Quasar and Blazar Spectra (Kinney+ 1991)
3158	A	IUE Ultraviolet Spectral Atlas (Wu+ 1991)
3159	AN	Ca II H and K Measurements Made at MWO (Duncan+ 1991)
3160	ANU	Cat Bib Vitesses Radiales Stellaries (Barbier-Brossat, Petit 1990)
3161	ANU	Cat de Vitesses Radiales Moyennes Stellaries (Barbier-Brossat 1989)
3162A	ANU	General Catalogue of Ap and Am Stars (Renson+ 1991, Renson 1992)
3163	ANU	Fourth Catalog of Am Stars with Known Spectral Types (Hauck 1992)
3164	BNU	Cat of Eq Widths of Interstellar 217 nm Band (Friedemann 1992)
3165	BNU	A Catalogue of [Fe/H] Determinations (Cayrel de Strobel+ 1991)
3166	ANT	A New Library of Stellar Optical Spectra (Silva + Cornell 1992)
3167	ANT	Atlas of UV Spectra of Starforming Galaxies (Kinney+ 1993)
3169	AT	Photometric Atlas of the Spectrum of Procyon (Griffin 1979)

**Category 4: Cross Identifications**

ADC #	Status Code	Abbreviated Catalog Title
4001	BN	Transit Tables for Open Clusters (Mermilliod 1979)
4005A	AM	Table of Correspondences BD/CD/CPD (Jung, Bischoff 1971)
4006	BN	Catalogue of Correspondences CSI/ADS/IDS (Jung+ 1973)
4007	BN	Table of Correspondences Giclas/BD (Mermilliod unpub)
4008	BHN	Cross Identifications of HDE Stars (Bonnet 1978)
4011	BN	Correspondences CD/CPD, Zones -18 to -39 (Bonnet)
4012	AFNOT	SAO-HD-GC-DM Cross Index (ADC 1983)
4013	AN	Dearborn Catalogue - HD Cross Index (Nagy 1983)
4016	BHN	Spectroscopic Binaries, Toulouse Catalog (Pedoussant+ 1985)
4017A	ANOT	HD,HDE,DM Identifications in Open Clusters (Mermilliod 1986)
4018	ANOPT	WDS-DM-HD-ADS Cross Index (Roman 1987)
4019	D	CD-CPD Cross Index (Rappaport, Warren 1987)
4020	BN	Identifications of Metal-Deficient F-M Stars (Bartkevicius+ 1986)
4021	AHN	Infrared Source Cross Index (Schmitz, Mead, Gezari 1987)
4903	AHNT	HD-YBS Cross Index (Nagy unpub)
4904	AHNT	YBS-HD Cross Index (Nagy unpub)
4905	AGHNT	Gen Cat Var Stars 2: Table 1 Nomenclature (Nagy 1978)
4906	AHMNT	Gen Cat Var Stars 2: Table 6 BD/CD/CPD Correspondences (Nagy 1978)
4914	AHNT	AGK3-BD Cross Index (Warren 1978)
4915	AHNT	BD-AGK3 Cross Index (Warren 1978)
4916	AHNT	Gen Cat Var Stars 2: Table 4 Flamsteed Correspondences (Nagy 1978)
4917	AHNT	Gen Cat Var Stars 2: Table 2 Bayer Correspondences (Nagy 1978)
4918	AHNT	Gen Cat Var Stars 2: Table 5 HR=BS Correspondences (Nagy 1978)
4919	AHNT	Gen Cat Var Stars 2: Table 12 Ross Correspondences (Nagy 1978)
4920	AHNT	Gen Cat Var Stars 2: Table 13 Innes Correspondences (Nagy 1978)
4921	AHNT	Gen Cat Var Stars 2: Table 14 Bamberg Correspondences (Nagy 1978)
4922	AHNT	Gen Cat Var Stars 2: Tables 15-18 OK,VB,VV,TV Correspondences (Nagy 1978)
4923	AHNT	Gen Cat Var Stars 2: Table 10 Sonneberg Correspondences (Nagy 1978)
4924	AHNT	Gen Cat Var Stars 2: Table 7 HD Correspondences (Nagy 1978)
4925	AHNT	Gen Cat Var Stars 2: Table 21 CSV Correspondences (Nagy 1978)
4926	AHNT	Gen Cat Var Stars 2: Table 8 AN Correspondences (Nagy 1978)
4927	AHNT	Gen Cat Var Stars 2: Table 9 HV Correspondences (Nagy 1978)
4928	AHNT	Gen Cat Var Stars 2: Table 11 SVS Correspondences (Nagy 1978)
4929	AHNT	Gen Cat Var Stars 2: Table 20 Prager Correspondences (Nagy 1978)
4930	AHNT	Gen Cat Var Stars 2: Table 19 Zinner Correspondences (Nagy 1978)

## Category 5: Combined and Derived Data

ADC #	Status Code	Abbreviated Catalog Title
5001A	AFHNT	Nearby Stars, complete data (Gliese 1969)
5003	BHN	FK4/FK4 Supplement Data (Morin 1973)
5005A	AHNT	Colours, Luminosities, and Motions Nearer K-M Giants (Eggen 1966)
5007	CN	Space Velocities of G and K Giants (Yoss, Lutz 1971)
5008	CN	Space Velocity Catalogue (Eggen 1962)
5009	CN	New Kinematic Data for Bright Southern OB Stars, Tab 2 (Lesh 1972)
5010	BHN	New Kinematic Data for Bright Southern OB Stars, Tab 4 (Lesh 1972)
5011	BHN	High-Velocity Stars (Eggen 1964-1965)
5012	BHN	Reduced uvby, Beta Photometry (Philip+ 1976)
5013A	AN	Probable Members of the SMC (Azzopardi+ 1975; updated 1978)
5014	BHN	uvby Estimated Astrophysical Parameters (Philip, Egret 1980)
5015	BHN	SAO and Supplementary Data (Ochsenbein 1980)
5017	BHN	Supergiant Stars (Egret 1980)
5018	BHN	Late-Type Stars with CH, HHO or SiO Maser Emission (Engles 1979)
5019	BHN	Masses and Ages of Stars in 68 Open Clusters (Piskunov 1980)
5021	CN	Stellar Cat Attitude Determination in Space, Ver II.I (Stein 1980)
5024	BN	Geneva Photometric Boxes (Nicolet 1982)
5025B	ANOT	Yale Bright Star Catalogue, 4th Revised Edition (Hoffleit 1982)
5027	BHN	Proper Motions, UBV Photometry, Region of h,Chi Per (Muminov 1980)
5028	BHN	Proper Motions, UBV Photometry, Four Open Clusters (Frolov 1980)
5030	BHN	Space Velocity Vectors of 2595 B and A Stars (Palous 1982)
5031	ANT	Kinematic Studies of Early-Type Stars (Rubin+ 1962)
5032	AFNOT	Stars within 25 pc of the Sun (Woolley+ 1970)
5033	BHN	DDO Phot, Radial Vel, G & K Stars at Galactic Poles (Yoss+ 1981)
5035	BHN	Nearby Star Data Published 1969-1978 (Gliese, Jahreiss 1979)
5036B	ANOT	Supplement to the Bright Star Catalogue (Hoffleit+ 1983)
5037	BHN	Cataclysmic Binaries, Low-Mass X-ray Binaries (Ritter 1984)
5038	ANU	UCL Ultraviolet Star Catalogue (Carnochan 1979)
5039	ANOU	Fourth Catalog of Orbits of Visual Binary Stars (Worley+ 1983)
5040B	AHN	Seventh Orbital Elements of Spectroscopic Binaries (Batten+ 1978)
5041	BHN	Physical Parameters of Spectroscopic Binaries (Kraitcheva+ 1980)
5042	BN	Orb Elements, Masses, Lum of Close Binaries (Svechnikov+ 1984)
5043	BHN	Masses and Ages of Stars in Twelve Open Clusters (Myakutin+ 1984)
5044B	D	Luminous Stars in Associations and Clusters (Humphreys+ 1984)
5045	ANOT	Combined List of Astronomical Sources, Version 3.1 (Hill+ 1985)
5046	BHN	Classical (Evolved) Algol-Type Binary Candidates (Budding 1984)
5047	AT	SKYMAP Catalog of 248516 Stars, Version 3.3 (McLaughlin 1986)
5048	AN	Field Type II Cepheids (Harris 1985)

ADC #	Status Code	Abbreviated Catalog Title
5049	BN	Spectroscopic Binaries - 14th Complementary Cat (Pedoussant+ 1984)
5050	ANO	Yale Bright Star Catalogue, 5th Revised Ed. (Hoffleit, Warren 1986)
5051	ANT	Data Inventory of Space-Based Obs, Ver 1.1 (Brotzman+ 1987)
5052	BN	Photometry and Proper Motions of Stars in M67 (Frolov+ 1986)
5053	BN	Brightest Stars (Ochsenbein, Halbwachs 1987)
5055	AN	High-Velocity Stars (Roman 1955)
5056	BN	[Fe/H], Velocity Comp, Orb Parameters for F Stars (Shevelev 1987)
5057	BN	[Fe/H], Dist, Vel Comp, Orb Par, Southern F Stars (Shevelev+ 1987)
5058	BN	[Fe/H], Vel, Orbits, F2-K5 Dwarfs 80pc from Sun (Marsakov+ 1987)
5059	BN	Cataclysmic Bin, Low-Mass X-ray Bin, Related Obj (Ritter 1988)
5060	BN	Spectroscopic Binaries, 15 Complementary Cat (Pedoussant+ 1988)
5061	BHN	Ptolemy's Star Catalogue (Almagest; Manitius 1913; Jaschek 1987)
5062	D	SKYMAP Catalog of 248563 Stars, Ver 3.5 (McLaughlin, Slater 1990)
5063	BN	Astrophysical Parameters (Popper 1980; Malkov 1989)
5064	ANO	Eighth Orbital Elements of Spectroscopic Binaries (Batten+ 1989)
5065	ANU	Spectroscopically Selected Gal Halo K Giants (Ratnatunga+ 1989)
5067	BHN	Astrometric Catalogue of Radio Stars (Walter+ 1990)
5068	ANU	Stellar Maser Observations (Benson+ 1990)
5069	AN	MK, UBV Time and Latitude Stars (Sato, Kuji 1990)
5070A	ANOU	Nearby Stars 3, Preliminary (Gliese, Jahreiss 1991)
5071	BNU	Chromosperically Active Binaries (Strassmeier+ 1988)
5072	BNU	Prelim Cat of Field Pop II Stars (POP2; Bartkevicius+ 1993)
5073A	BNU	Third Cat Em-Line Stars of the Orion Population (Herbig, Bell 1988)
5074	AN	Observational Data in Galactic Star-Forming Regions (Avedisova 1992)
5075	BNU	Cat of Astrophysical Parameters of Binary Systems (Malkov 1993)
5077	BT	SKYMAP Catalog of 248558 Stars, Ver 3.7 (Slater 1993)
5078	BNU	Cat of the Objects in the Direction of the SMC (Bischoff+ 1988)
5079	ANT	Catalog and Atlas of Cataclysmic Variables (Downes and Shara 1993)

**Category 6: Miscellaneous**

ADC #	Status Code	Abbreviated Catalog Title
6001	D	Photometric Sequences and Supplement 1 (Argue, Bok, Miller 1973)
6005	BHN	Sensitivity Functions of Photometric Systems (Hauck+ 1976)
6010	BHN	Semiempirical gf Values (Kurucz, Peytremann 1975)
6016	BN	Line Spectra of the Elements (Reader, Corliss 1980-1981)
6019	BN	UBV Photoelectric Sequences in SA 92-115 (Landolt 1973)
6025	ANOT	POSS Plate Data (Natl. Geo. Soc., Palomar Obs. 1960)
6026A	ANOT	Identification List of Lines in Stellar Spectra (Moore 1959)
6027B	A	IUE Merged Observation Log 4/3/78 - 2/28/89 (IUE NASA/ESA Obs. 1989)
6029	AFHNT	Finding List Multiplet Table NSRDS-NBS 3, Sec 1-10 (Adelman+ 1985)
6030	AHNT	Plate Centers of the ESO Sky Survey (Holmberg+ 1974)
6031	AHNT	Plate Centers, Epochs Lick/Mt. John Sky Survey (Lick Obs. 1965)
6032	AHNT	Bidelman-Parsons Spectroscopic/Bibliographic Cat (Parsons+ 1980)
6033	AN	Semiempirical gf Values for Fe II (Kurucz 1981)
6034	AHNT	Multiplet Table and Finding List for Mn I (Adelman+ 1989)
6035	BHN	Bibliographic Catalogue of Variable Stars (Huth, Wenzel 1986)
6037	BHN	Bibliography of Statistical Methods in Astronomy (Murtaugh+ 1986)
6038	BN	Bibliographic Cat of Variable Stars, Suppl 1 (Huth, Wenzel 1986)
6039	BN	Model Atmospheres for G,F,A,B,O Stars (Kurucz 1979)
6040	AHNT	Revised Yale Isochrones and Luminosity Functions (Green+ 1986)
6042	AN	Constellation Boundary Data (Delporte 1930; ADC 1987)
6043	AHNT	EXOSAT Observation Log (EXOSAT Obs 1987; Sternberg+ 1986)
6044	ANOT	Finding List Obs of Interacting Binary Sys, 5th ed. (Wood+ 1980)
6045	BN	Bibliographical Catalogue of Field RR Lyrae Stars (Heck 1988)
6046	ANOT	Interferometric Measurements of Binary Stars (McAlister+ 1988)
6047	BHN	Evolutionary Spectra of Galaxies (Rocca-Volmerange+ 1988)
6048	BN	Fe II Reference Catalogue (Viotti, Baratta 1988)
6049	ANOU	Constellation Boundary Data (Davenhall+ 1989)
6050	BN	Energy Dist Stellar Spectra. V. Normal Stars (Sviderskiene 1988)
6051	AN	Collisional Exc Rates Formaldehyde (Green 1991)
6052	AN	Bibliographic Cat of Variable Stars, Suppl 2 (Roessiger 1992)
6053	BN	Faint Photometric Sequences (1980-1990) (Ritzmann 1992)
6054	ANU	Horizontal Branch Stellar Model Calculations (Dorman 1992)
6056	BN	Tests of Shock Chemistry in IC443G (Turner+ 1992)
6057	BNU	Cat of Radii of Be Star Line Emitting Regions (Jaschek+ 1992)
6058	BNU	Bib Cat of Suspected Variable Stars Update (Roessiger+ 1993)
6059	BNU	Improved Collisional Excitation Rates Interstellar Water (Green+ 1993)

### Category 7: Nonstellar and Extended Objects

ADC #	Status Code	Abbreviated Catalog Title
7001B	ANOT	Rev New Gen Cat of Nonstellar Objects (RNGC; Sulentic, Tifft 1973)
7002B	RM	Master List of Nonstellar Objects (Dixon 1976)
7004A	ANOT	Abell and Zwicky Clusters of Galaxies (Abell 1958; Zwicky 1961-1968)
7005A	ANOU	Star Clusters and Associations, Selected Data (Alter+ 1970)
7006	AHNT	Polarization Meas Extragalactic Radio Sources (Eichendorf+ 1980)
7007	AGNOT	Dark Nebulae (Lynds 1962 updated)
7008	AHNT	Pulsars (Seiradakis unpub)
7009	AMNOT	Bright Nebulae (Lynds 1965)
7011	AHNT	Kitt Peak Quasar Cat, Selected Data (de Veny, Osborn, Janes 1971)
7012	AHNT	Third UHURU X-Ray Catalog, Selected Data (3U; Giacconi+ 1974)
7013	AHNT	Globular-Cluster Catalog (Arp 1965)
7014	AHNT	Galactic Supernova Remnants Catalogue (Clark, Caswell 1976)
7015	AHNT	Galactic Supernova Remnants Catalogue (Ilovaisky, Lequeux 1972)
7016	AHNT	Reference Catalogue of Bright Galaxies (RC1; de Vaucouleurs+ 1964)
7018	ANOT	Fourth UHURU X-Ray Catalogue (4U; Forman+ 1978)
7019	ANOT	Second Ariel X-Ray Catalogue (2A; Cooke+ 1978)
7020	ANOT	H II Regions (Sharpless 1959)
7021	ANOT	Reflection Nebulae (van den Bergh 1966)
7023	AHNT	Absorption Lines in QSO Spectra (Ellis, Phillipps 1978)
7024A	ANOT	Strasbourg Catalog of Galactic Planetary Nebulae (Acker+ 1980)
7026B	ANOT	Uppsala General Catalogue of Galaxies (UGC; Nilson 1973)
7028	AHNT	Southern Groups and Clusters of Galaxies (Duus, Newell 1977)
7031A	ANOU	Star Clusters/Associations. I. Associations (Ruprecht+ 1982)
7034A	ANOT	ESO/Uppsala Survey of the ESO(B) Atlas (Lauberts 1982)
7036	AFHNT	Galaxy Redshifts (Rood unpub)
7039A	AHNT	Bibliography on the Surface Photometry of Galaxies (Davoust+ 1982)
7042A	AHNT	Coma Cluster I. Data for 6724 Galaxies (Godwin+ 1983)
7043	ANU	Wisconsin Soft X-Ray Diffuse Backgr All-Sky Surv (McCammon+ 1983)
7044A	ANOU	Star Clusters/Associations. II. Globular Clusters (Ruprecht+ 1981)
7047	ANOT	Seyfert Galaxies (Weedman 1977-1978)
7048	AHNT	Middle-Ultraviolet Photometry of Virgo Cluster Gal (Smith+ 1982)
7049	ANOT	Galaxies and Clusters of Galaxies I-VI (Zwicky+ 1960-1968)
7050	AHNT	CO Radial Velocities Toward Galactic H II Regions (Blitz+ 1982)
7051	ANOU	Revised Shapley-Ames Catalog of Bright Galaxies (Sandage+ 1981)
7054	ANOT	Extragalactic Radio Source Identifications (Veron-Cetty+ 1983)
7055	AHNT	X-Ray Source Pos More Accurate than 4U or 2A, 2nd ed. (Dolan 1983)
7056	AHNT	Redshifts for Abell Clusters (Sarazin+ 1982)
7057	AHNT	List of Globules (Wesselius 1979)

ADC #	Status Code	Abbreviated Catalog Title
7058	ANOU	Ariel Catalogue of X-Ray Sources (3A; Warwick+ 1981)
7061A	ANOT	Markarian Galaxies (Markarian+ 1967-1981)
7062	ANOT	Morphological Catalog of Galaxies (Vorontsov-Velyaminov+ 1962-1968)
7063	AHNT	Ultraviolet Excess Galaxies (Mitchell+ 1982)
7064	AHNT	CO Observations of Galaxies (Verter 1985)
7068A	AHNT	Dark Nebulae and Globules, Gal Long 240 to 360 (Feitzinger+ 1984)
7069	BHN	Asiago Catalogue of Quasistellar Objects (Barbieri+ 1982)
7070A	AHNT	Galaxies Rotation Curves (Baiesi-Pillastrini+ 1983)
7071	AHNT	Redshifts for Zwicky's Near Clusters (Baiesi-Pillastrini+ 1984)
7072	AHN	Stellar Velocity Dispersions. I. Std Galaxies (Whitmore+ 1985)
7073	AFNOT	IRAS Small Scale Structure Catalog, Ver 1.00 (Helou, Walker 1985)
7074	AHNT	Atlas of Peculiar Galaxies (Arp 1966)
7075	AHNT	IR Mags, H I Velocity Widths for Nearby Galaxies (Aaronson+ 1982)
7077	AHNT	Isolated Pairs of Galaxies in the Northern Hem (Karachentsev 1972)
7079A	AHNT	Galaxies South of Dec -30, Obs Spectroscopically (Fairall+ 1983)
7080	AHNT	HEAO A-1 X-Ray Source Catalog (Wood+ 1984)
7081A	AHNT	Second Catalogue of X-ray Sources (Amnuel+ 1982)
7082A	AHNT	Isolated Galaxies (Karachentseva+ 1973)
7083	BHN	Isolated Triplets of Galaxies (Karachentseva+ 1987)
7084A	AHNT	Groups of Galaxies. III. The CfA Survey (Geller, Huchra 1983)
7085A	AHNT	Systematic Properties of Compact Groups of Galaxies (Hickson 1982)
7086A	AHNT	Groups of Galaxies. I. Nearby Groups (Huchra, Geller 1982)
7087A	AHNT	Study of 1889 Rich Clusters of Galaxies (Leir, van den Bergh 1977)
7088	BHN	CEDAG Catalogue of Clusters of Galaxies (Fernandez+ 1984)
7089A	AHNT	Compact Groups of Compact Galaxies (Shakhbazyan+ 1973-1979)
7090A	ANOT	Merged Catalogue of Galaxies (Kogoshvili 1986)
7091	AHNT	IRAS Asteroid and Comet Survey 1.00 (IPAC 1986)
7092	ANOT	Open Cluster Data, 5th Edition (Lynga 1987)
7094	AU	POSS Atlas of Selected Molecular Clouds (Klinglesmith+ 1987)
7095	AHNT	Redshifts, Velocity Dispersions for Abell Clusters (Struble+ 1987)
7096	D	Morphological Properties of 2712 Abell Clusters (Struble+ 1987)
7098	BHN	2810 Nearby Galaxies (Kraan-Korteweg 1986)
7099	BHN	Radial Velocities of Galaxies (Palumbo+ 1986)
7100	ANOU	Morphological Catalog of Galaxies, Vol 5 (Kogoshvili 1987)
7101	BHN	Star Clusters/Associations. III. Open Clusters (Ruprecht+ 1981)
7106	D	Open Cluster Interstellar Matter (OCISM) Database (Leisawitz 1988)
7107	AHNT	Southern Redshifts (Fairall, Jones 1988)
7108A	ANOU	Asteroids II Machine-Readable Data Base (Lagerkvist 1988)
7109	AT	IRAS Surface Brightness Maps Large Optical Galaxies (Rice+ 1988)

ADC #	Status Code	Abbreviated Catalog Title
7110	AOU	Rich Clusters of Galaxies (Abell, Corwin, Olowin 1989)
7112	ANOT	Second Reference Cat of Bright Galaxies (RC2; de Vaucouleurs+ 1976)
7113	ANOU	Galaxies, Quasars Observed in the IRAS Survey, Ver 2 (IPAC 1989)
7114	B	Massachusetts-Stony Brook Galactic Plane CO Survey (Clemens+ 1986)
7115	AU	Surface Photometry of ESO-Uppsala Galaxies (Lauberts+ 1989)
7117	ANOT	New Optical Cat of Quasi-Stellar Objects (Hewitt, Burbidge 1989)
7118	ANOT	NGC 2000.0 (Sky Publishing 1988, ed. Sinnott)
7119	BN	Extragalactic DB I. Catalog of Principal Galaxies (Paturel+ 1989)
7120	AU	COS-B Final Database (Mayer-Hasselwander 1985)
7126	ANOU	Quasars and Active Gal Nuclei, 4th Edition (Veron-Cetty+ 1989)
7128	D	Observed and Derived Quantities for Pulsars (Manchester+ 1990)
7129	ANOU	CfA Redshift Catalogue (Huchra 1990)
7130	AHNT	SAS-2 Gamma-Ray Observations (Fichtel+ 1990)
7133	ANOU	Revised Reference Cat of Galactic Supernova Remnants (Green 1991)
7135	ANU	Kiso Survey for Ultraviolet-Excess Galaxies (Takase+ 1984-1990)
7136	AHN	Extragalactic Data Base II. The H I Data (Bottinelli+ 1990)
7137B	ANT	Third Reference Cat of Bright Galaxies (RC3; de Vaucouleurs+ 1991)
7138	D	Catalogue of Southern Dark Clouds (Hartley+ 1986)
7139	D	CO Observations of Galaxies 1985-1989 (Verter 1990)
7140	ANU	Galaxies Behind Milky Way (Saito+ 1991)
7141	ANU	Spectrophotometric Atlas of Galaxies (Kennicutt Jr. 1992)
7142	ANU	Southern Redshifts Catalogue, 5th Version (Fairall, Jones 1991)
7143	ANU	Quasar Candidates (Crampton+ 1985-1990)
7144	ANU	CfA Redshift Catalogue (Huchra+ 1992)
7146	AN	Quasars and Active Nuclei, 5th Edition (Veron-Cetty+ 1991)
7147	ANU	Photometric Cat of Northern Bright Galaxies (Kodaira+ 1992)
7148	ANT	Multicolor Survey High-Redshift Quasars, $z \geq 2.2$ (Warren+ 1991)
7149	ANT	Accurate Pos 528 Hi-Z, Lum QSO's HST Snap-Shot Survey (Schneider+ 1992)
7150	BNU	Kiso Survey for Ultraviolet-Excess Galaxies (Takase+ 1984-1992)
7151	BNU	Structure Parameters of Galactic Globular Clusters (Webbink 1985)
7152	BNU	Einstein Obs Ex M-S Survey (EMSS; Gioia+ 1990, Stocke+ 1991)
7157	ANT	The Extended 12 Micron Galaxy Sample (Rush+ 1993)
7158	BNU	Revised and Updated Cat of QSOs (Hewitt, Burbidge 1993)

**Category 8: Radio Sources**

ADC #	Status Code	Abbreviated Catalog Title
8002	BN	Molonglo Reference Catalog of Radio Sources (Large+ 1981)
8003	AHNT	An Optical Catalogue of Radio Galaxies (Burbidge, Crowne 1979)
8004	ANOT	Fourth Cambridge Survey of Radio Sources (4C; Pilkington+ 1965-67)
8005	AHNT	Extragalactic Radio Sources, Flux Den > 1 Jy at 5 GHz (Kuehr+ 1981)
8006	AU	1400-MHz Sky Survey, Maps Covering Dec -5 to +82 (Condon+ 1985-1986)
8007	ANU	Hat Creek High-Latitude H I Survey (Heiles+ 1974-1976)
8008	ANU	Parkes High-Latitude H I Survey (Cleary+ 1979)
8009	ANU	Argentina High-Latitude H I Survey (Colomb 1980)
8011	ANU	Berkeley Low-Latitude H I Survey (Weaver, Williams 1973)
8012	BN	Orion A Emission-Line Survey (Jewell+ 1989)
8014	ANU	87GB Radio Sources 4.85 GHz (Gregory, Condon 1990)
8015	AN	Parkes Radio Sources Catalogue, Version 1.01 (Wright, Otrupcek 1990)
8016	AN	Molonglo Reference Catalogue of Radio Sources (Large+ 1991)
8017	ANU	31524 1.4-GHz Sources (White and Becker 1992)
8018	ANT	6C Survey of Radio Sources I (6CSRSI; Baldwin+ 1985)
8019	BNT	Deep 370 MHz Westerbork Survey (Wieringa 1991,1993)
8020	BNU	Cat of 5 GHz Galactic Plane Sources (Haynes+ 1979)
8021	ANT	6C Survey of Radio Sources II (6CSRSII; Hales+ 1988)
8022	ANT	6C Survey of Radio Sources III (6CSRSIII; Hales+ 1990)
8023	ANT	6C Survey of Radio Sources IV (6CSRSIV; Hales+ 1991)
8024	ANT	6C Survey of Radio Sources V (6CSRSV; Hales+ 1993)
8025	ANT	6C Survey of Radio Sources VI (6CSRSVI; Hales+ 1993)

## Chapter 3

# Brief Descriptions of Selected Catalogs

This chapter contains brief descriptions and related information for over 300 machine-readable astronomical catalogs or over one third of the catalogs available from the ADC. The entries are in ADC catalog number order and are grouped by CDS category code. (See Chapter 1.)

The subject keywords listed are those assigned and used by the ADC staff. Chapter 4 contains an index of catalog numbers by keyword. The reference list contains the original published source document and references mentioned in the brief descriptions. The source reference is listed in bold font.

Information on the number of files and the total size of each catalog are given. Readers may wish to request large catalogs be shipped on physical media (e.g., magnetic tape) instead of retrieving them over the network. Catalogs available on CD-ROM have that fact noted in the status portion of the description.

The status entries in this chapter indicate availability of the machine-readable catalogs and documentation. These entries also include notes on checks performed by the ADC staff.

### 3.1 Astrometric and Positional Data

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**ADC 1012**

Herz, N.

**Stern-Katalog für die Zone von -6 grade bis -10 grade Südlicher Deklination für das Äquinoktium 1890, Erste und Zweite Abtheilungen (1906)**

**Keywords:** *positional data*

**Description:** A total of 10212 stars in the declination zone  $-6^{\circ}$  to  $-10^{\circ}$  were observed with the Repsold meridian circle of the Kuffner Observatory in Vienna in the period 1888 until 1891. The positions were reduced to the system of the southern zone of the *Astronomische Gesellschaften Catalog*. The accuracy varies with position and magnitude but is about 0.042 seconds and  $0.75''$  for right ascension and declination, respectively. In addition to the positions the catalog contains a running number, the stellar magnitude, the epoch of observation, and the BD number.

**References:**

- Herz, N. 1906, Abh. Königlich Preussischen Akad. der Wissenschaften, Berlin Math. Abh.  
 Herz, N. 1907, Abh. Königlich Preussischen Akad. der Wissenschaften, Berlin Math. Abh.

**File Information:** 2 files, 530 Kbytes

**Status:** Has been checked for consistency  
 Available in microfiche version  
 Available via network

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**ADC 1062C**

Høg, E., and von der Heide, J.

**Perth 70, A Catalogue of Positions of 24900 Stars (1976)**

**Keywords:** *positional data; proper motions*

**Description:** This *Perth 70, A Catalogue of Positions of 24900 Stars* contains accurate positions and magnitudes of 24871 reference stars, mostly in the Southern Hemisphere, plus other useful data such as approximate proper motions radial velocities, and parallaxes. The *Perth 70* is a result of meridian circle observations made by the Hamburg Observatory expedition to Perth as part of the international effort on Southern Reference Stars (SRS). The catalog described here provides the mean values for each star, including the position, magnitude, and mean epoch of observation; the proper motions, however, were neither observed nor recomputed from comparing the Perth positions to older material.

**Reference:**

- Høg, E., and von der Heide, J. 1976, Abh. der Hamburger Sternw., Band IX, 15

**File Information:** 4 files, 3.63 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Full documentation available

**ADC 1069**

Dieckvoss, W., and Heckmann, O.

**AGK3 Catalogue (1975)**

**Keywords:** *positional data; proper motions; photographic magnitudes*

**Description:** The *AGK3* catalog of positions and proper motions is a photographic catalog based on plates taken with the same instruments as the *AGK2* and referred to a network of meridian observations (the *AGK3R*). The *AGK2* positions were rereduced using its reference catalog, *AGK2A*, reduced to the *FK4* system. The positions and motions are on the *FK4* system. The positional errors in one coordinate are about 0.025". Information contained in the catalog includes in addition to the positions and proper motions in the B1950 system, the *AGK3* zone and number, a component identification when duplicate *AGK3* numbers occur, photographic magnitude, spectral type, number of photographic observations used to determine the position, epoch of the position, epoch difference: *AGK3* - *AGK2* and the DM number and component.

**Reference:**

Dieckvoss, W., and Heckmann, O. 1975, Hamburg-Bergedorf

**File Information:** 1 file, 14.0 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Full documentation available

**ADC 1071**

Warren Jr., W.H., and Kress, K.

**Catalog of Supplemental Stars to the Bonner Durchmusterung (1980)**

**Keywords:** *Durchmusterungen*

**Description:** The catalog contains only those stars listed as footnote entries in the *Bonner Durchmusterung*. The initial catalog was prepared from the second edition of the *BD*, but proofreading and checking were accomplished by using the reprinted edition, which incorporated all errata known at that time. Thus, it was possible to simultaneously derive tables of supplemental stars added, deleted, or modified for the reprinted edition. The catalog was prepared to enable discrimination among main and footnoted *BD* stars in other machine-readable catalogs lacking the lowercase letters that identify the supplemental stars. Data included are *BD* number, lowercase letter identifier, right ascension and declination at equinox B1855, and *BD* magnitude.

**Reference:**

Warren Jr., W.H., and Kress, K. 1980, *ADC Bull.* 1, 19

**File Information:** 1 file, 22.1 Kbytes      **Status:** Has been checked for consistency  
 Available in microfiche version  
 Documentation in hard copy form only  
 Available via network

**ADC 1073B**

Eichhorn, H., et al.

**Catalogue of 20457 Star Positions Obtained by Photography in the Declination  
 Zone  $-48^\circ$  to  $-54^\circ$  (1950,1983)**

**Keywords:** *positional data; photographic catalog*

**Description:** This catalog is also known as the *Sydney Photographic Catalogue  $-48^\circ$  to  $-54^\circ$*  or *SPC* and gives positions determined by the plate overlap method from plates taken at the Sydney Observatory in 1964. The catalog was originally planned to fill part of the gap left by the *Yale Zone* and *Cape Photographic Catalogues*, although the gap has in the meantime been closed by catalogs prepared at Sydney Observatory (Nicholson 1979, King and Lomb 1983). Data in the catalog include star number (CPD; identifications not complete), source catalog identification (AC zones) and related information, right ascension and declination on the *FK4* system (equinox and equator B1950, average epoch 1964.475), photovisual magnitude, and numbers of images and pairs of diffraction spectra used in computing position.

**References:**

- Eichhorn, H., Googe, W.D., Lukac, C.F., and Murphy, J.K. 1983, *AJ*, **88**, 546  
 King, D.S., and Lomb, N.R. 1983, *Sydney Southern Star Catalogue*, *J. Proc. R. Soc. N.S.W.*, 116, 53 (Sydney Obs. Paper No. 96) (catalog 1086A)  
 Nicholson, W. 1979, in *IAU Colloquium 48, Modern Astrometry*, ed. by F.V. Prochazka and R.H. Tucker (Vienna, University Observatory), p. 515

**File Information:** 1 file, 1.03 Mbytes      **Status:** Has been checked for consistency  
 Documentation in hard copy form only  
 Available via network

**ADC 1078**

Loyola, P.R., and Shishkina, V.N.

**Third Santiago-Pulkovo Fundamental Stars Catalogue, A Catalogue in R.A. of  
 671 Fundamental Bright Stars of the Zone  $+40^\circ$  to  $-90^\circ$  (1972)**

**Keywords:** *positional data; fundamental stars; meridian observations*

**Description:** The catalog is a compilation of right ascensions (the primary datum) of 671 fundamental bright stars as measured with the Zeiss broken transit circle instrument at Cerro Calán National Observatory in Chile. Observations were made in a series of 70 stars observed along the meridian from  $+42^\circ$  to the pole in upper culmination and from the pole to  $-70^\circ$  in lower culmination, the program consisting of 231 such series of observations. In addition to the final reduced right ascensions for the program stars, the catalog contains cross identifications to the N30 and the *FK4*

catalogs, visual magnitudes, approximate declinations (equinox B1950.0), mean epochs of the observations, and mean errors of the determined right ascensions. The catalog data were keyed directly to disk storage, proofread, and then transferred to magnetic tape at the Astronomical Data Center, NASA/GSFC.

**Reference:**

Loyola, P.R., and Shishkina, V.N. 1972, *Publ. Dep. Astronomy, Univ. of Chile*, 2 (No. 5) 159

**File Information:** 1 file, 26.2 Kbytes      **Status:** Has been checked for consistency  
 Available in microfiche version  
 Documentation in hard copy form only  
 Available via network

**ADC 1079**

Giclas, H.L., Burnham Jr., R., and Thomas, N.G.

Lowell Proper Motion Survey 8991 Stars with  $m > 8$ ,  $PM > 0.26''/\text{Year}$  in the Northern Hemisphere (1971)

**Keywords:** *positional data; proper motions*

**Description:** The catalog contains a summary of many individual papers published in the *Lowell Observatory Bulletins* in the years 1958 to 1970. The data in the machine-readable version include observed positions, proper motions, estimated photographic magnitudes and colors, and references to identifications in other catalogs. Photoelectric data on the UBV system are included for many stars, but no attempt was made to find all existing photometry. The notes file was computerized at the ADC by keying the notes directly to disk storage.

**Reference:**

Giclas, H.L., Burnham Jr., R., and Thomas, N.G. 1971, *Lowell Obs., Flagstaff, Arizona*

**File Information:** 3 files, 1.09 Mbytes      **Status:** Has been checked for consistency  
 Available in microfiche version  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 1080**

Morgan, H.R.

Catalog of 5,268 Standard Stars Based on the Normal System N30 (1952)

**Keywords:** *positional data; proper motions; fundamental stars; fundamental catalog*

**Description:** The catalog was constructed primarily to assist in the reduction and interpretation of planetary observations, particularly those made in the nineteenth century. The new catalog was considered necessary because the only fundamental catalogs available at the time (*FK3*, *GC*) have

mean epochs around 1900, and over the period of approximately fifty years, positional accuracies had deteriorated from cumulative effects of proper motion inaccuracies. The ADC version of the data file was prepared from the original file by reformatting and incorporating changes to effect uniformity in the data fields. The notes file was created at the ADC by keying the information directly to disk storage. Cross checks were performed to assure that all stars flagged as having notes have entries in the notes file and that all notes are flagged in the data file.

**Reference:**

Morgan, H.R. 1952, *Astron. Papers Amer. Ephemeris* 13, Part III

**File Information:** 3 files, 507 Kbytes      **Status:** Has been checked for consistency  
 Available in microfiche version  
 Available via network  
 Full documentation available

**ADC 1082**

Anguita, C., et al.

**First Santiago-Pulkovo Fundamental Stars Catalogue (1975)**

**Keywords:** *positional data*

**Description:** The catalog contains right ascension observations of 1043 *FK4* stars made during the period 1963 to 1968 with the Repsold Meridian Circle located at Cerro Calán National Observatory in Chile. The *FK4* stars were observed during a series of observations of the Southern Reference Stars (SRS) and Bright Stars (BS) International Programs. Approximately 30 to 45 *FK4* stars were measured during each two to two-and-a-half-hour series and included stars observed along the meridian between  $+41^\circ$  and  $-90^\circ$  in upper culmination and from  $-90^\circ$  to  $-68^\circ$  in lower culmination. The lower culmination observations are given in the second file.

**Reference:**

Anguita, C., Carrasco, G., Loyola, P.R., Bedin, V.N., Naumova, A.A., Polojentsev, D.D., Polojentseva, T.A., Tavastsherna, K.N., and Zverev, M.S. 1975, *Publ. Dep. Astronomy, Univ. of Chile*, 2 (No. 6) 181

**File Information:** 2 files, 53.8 Kbytes      **Status:** Has been checked for consistency  
 Documentation in hard copy form only  
 Available via network

**ADC 1086A**

King, D.S., and Lomb, N.R.

**Sydney Southern Star Catalogue (1983)**

**Keywords:** *positional data; proper motions*

**Description:** The catalog provides positions and proper motions for 23287 stars primarily between  $-50^\circ$  and  $-63.5^\circ$  in the first file. The second and third files contain, respectively, positions only for 3244 faint Sydney Astrographic stars and 395 stars south of declination  $-63.5^\circ$  that were primarily

used as reference stars. All observations were made with a 23 cm Tayler and Hobson camera and measured with a Grubb-Parsons photoelectric measuring machine.

**References:**

King, D.S., and Lomb, N.R. 1983, *J. Proc. R. Soc. N.S.W.* 116, 53

King, D.S., and Lomb, N.R. 1983, *Syd. Obs. Pap. No.* 96

**File Information:** 3 files, 1.56 Mbytes      **Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 1089**

Carrasco, G., and Loyola, P.R.

Santiago 67 Catalogue, Catalogue of 7610 Stars, Declination Zone  $-25^\circ$  to  $-45^\circ$ ,  
Equinox 1950 (1981)

**Keywords:** *positional data; proper motions*

**Description:** This catalog contains the results of differential astrometric observations made with the Repsold Meridian Circle at the Cerro Calán National Observatory in Chile. The program stars were selected from the Southern Reference Stars (SRS) and the Bright Stars (BS) International Programs in the declination zone  $-25^\circ$  to  $-47^\circ$ . Positional and other data are provided for 2756 SRS, 336 BS, and 216 FK4 stars observed from March 1963 to October 1970 in the zone  $-25^\circ$  to  $-35^\circ$ . In the same series 216 FK4 stars were observed in the zone  $-20^\circ$  to  $-40^\circ$ , and 312 in the zone  $+40^\circ$  to  $+10^\circ$  (right ascension only). A second zone ( $-35^\circ$  to  $-47^\circ$ ), which was observed from March 1963 to May 1972, includes 3236 SRS and 467 BS stars, plus 354 FK4 stars in the zone  $+40^\circ$  to  $+10^\circ$  (right ascension only) and 236 in the zone  $-30^\circ$  to  $-52^\circ$ . The data include program number, DM designation, magnitude, spectral type, equatorial coordinates (B1950.0), errors, epochs of observation, numbers of observations, and proper motions.

**Reference:**

Carrasco, G., and Loyola, P.R. 1981, *Publ. Dep. Astronomy, Univ. of Chile*, Vol. 4

**File Information:** 3 files, 659 Kbytes      **Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 1090**

Eichhorn, H., et al.

Accurate Positions of 502 Stars in the Region of the Pleiades (1970)

**Keywords:** *positional data; proper motions; regional catalog*

**Description:** The catalog contains the right ascensions and declinations (equinox B1900.0 and epoch B1955.0) of 502 stars in a region of about  $1.5^\circ$  square in the Pleiades cluster, centered on  $\eta$  Tau. These coordinates have been derived from measurements of stellar images obtained with 65 exposures of various durations on 14 photographic plates with two telescopes at McCormic Observatory

and Van Vleck Observatory. The plates were reduced by the plate overlap method, which resulted in a high degree of systematic accuracy in the final positions. Data in the machine version include Hertzsprung number, color index, photovisual magnitude, right ascension and declination and their standard errors, proper motion, and differences between the present position and those of König (1924). Data for exposures, plates, and images measured, present in the published catalog, are not included in the machine version.

**References:**

Eichhorn, H., Googe, W.D., Lukac, C.F., and Murphy, J.K. 1970, *MmRAS*, 73, 125  
 König, A. 1924, *Astron. Nachr.*, 222, 177

**File Information:** 1 file, 39.2 Kbytes      **Status:** Has been checked for consistency  
 Documentation in hard copy form only  
 Available via network

**ADC 1091**

Newhall, X.X., Standish Jr., E.M., and Williams, J.G.

**Jet Propulsion Laboratory Long Ephemeris Tape of Planetary and Lunar Ephemerides for the Years 1410 BC to 3003 AD (1983)**

**Keywords:** *ephemerides*

**Description:** An ephemeris of the Moon and nine planets has been numerically integrated from 1411 BC to 3002 AD. The starting data were based on observations: laser ranging for the Moon, radar for the inner planets, and optical observations for the outer planets. Masses were derived from planetary probe tracking when available; IAU values were used for the others. Fit is excellent for the period of observations; obviously, it will degrade as the extrapolation is carried farther to the future or past.

**Reference:**

Newhall, X.X., Standish Jr., E.M., and Williams, J.G. 1983, *A&A*, 125, 150

**File Information:** 6 files, 156 Mbytes      **Status:** Has been checked for consistency  
 Documentation in hard copy form only

**ADC 1092**

Fallon, F.W.

**Yale Zone Catalogue, Zone -60° to -70° (1983)**

**Keywords:** *positional data; proper motions; photographic magnitudes*

**Description:** This catalog continues the series of Yale Zone Catalogues published in *Yale Transactions*, Volumes 11-31. The character-coded machine version was prepared at the Astronomical Data Center and is based on a binary file provided by the author. The original binary file, in addition to presenting distribution problems for other computer installations, contained a number of difficulties, including distinguishing between zeros and missing data, precision uncertainties with the binary

data, and positions given in radians. These problems are corrected in the present version and errors that had been detected and kindly supplied by Dr. D. Hoffleit of Yale University were fixed. Data given in the machine version include serial number, identification in the *Cape Photographic Durchmusterung* or the *Cape Photographic Catalogue*, right ascension and declination (equinox B1950.0), position epoch, annual proper motion, magnitude (visual), color index (CI), and plate data for each star. (The latter are not in the published version.) Codes are given for magnitude, CI, and proper motion sources.

**Reference:**

Fallon, F.W. 1983, *Yale Trans.* 32, Part II (New Haven: Yale Univ. Obs. )

**File Information:** 1 file, 1.55 Mbytes

**Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 1093A**

Standish Jr., E.M.

Jet Propulsion Laboratory Planetary and Lunar Ephemerides for the Years 1960 to 2030, Mean Equator and Equinox B1950 (1981)

**Keywords:** *ephemerides*

**Description:** The Fortran files contain the necessary software for creating, testing, and using the file on the user's computer. The data file is the ephemeris data themselves, containing the ephemeris of all nine planets, the Sun, the Moon, the solar system barycenter, the Earth-Moon barycenter, nutations, and librations. The software is written entirely in Fortran 77, and the resulting files are written on disk as direct access files. The coordinate system for ephemerides with a DE number <200 are in respect to the mean equator and equinox of 1950.0, as defined by the *FK4* stellar catalog reference system.

**References:**

Standish Jr., E.M. 1981, *Jet Propulsion Laboratory*

Standish Jr., E.M. 1990, *A&A*, 233, 252

**File Information:** 9 files, 17.4 Mbytes

**Status:** Has been checked for consistency  
Available via network  
Available on CD-ROM  
Full documentation available

**ADC 1094A**

Standish Jr., E.M., and Seidelmann, P.K.

Jet Propulsion Laboratory Planetary and Lunar Ephemerides for the Years 1960 to 2025, Mean Equator and Equinox J2000 (1981)

**Keywords:** *ephemerides*

**Description:** The Fortran files contain the necessary software for creating, testing, and using the file on the user's computer. The data file is the ephemeris data themselves, containing the ephemeris of all nine planets, the Sun, the Moon, the solar system barycenter, the Earth-Moon barycenter, nutations, and librations. The software is written entirely in Fortran 77, and the resulting files are written on disk as direct access files. The coordinate system for ephemerides with a DE number 200 or greater are in respect to the mean equator and equinox of J2000, coinciding with the origin of the *FK5*.

**References:**

Standish Jr., E.M., and Seidelmann, P.K. 1981, *BAAS*, 13, 874

Standish Jr., E.M. 1982, *A&A*, 114, 297

Standish Jr., E.M. 1990, *A&A*, 233, 252

**File Information:** 9 files, 16.0 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 1096**

Fresneau, A.

*Astrographic Catalogue (1983)*

**Keywords:** *astrographic zones; positional data; photographic magnitudes*

**Description:** This machine-readable version of the *Astrographic Catalogue (AC)*, zones  $+01^\circ$  to  $+31^\circ$  is the result of the determination of mean values for position and magnitude at a mean epoch of observation for each unique star in the original catalogs. The zones considered here (Oxford, Paris, Bordeaux, Toulouse, Algiers [partial]) contained 1,870,976 individual measures from which the catalog of mean data for 1,025,208 stars was derived. Further analysis by Dr. D.W. Dunham and at the ADC yielded an additional 27897 apparently duplicate entries, which were eliminated to produce the final catalog. The estimated mean standard errors for positional and magnitude data are  $0.4''$  in each coordinate and 0.4 mag, respectively. Data in this version include  $\langle m_{pg} \rangle$ ,  $\langle \text{Epoch} \rangle$ ,  $\langle \text{right ascension} \rangle$  at mean epoch, and  $\langle \text{declination} \rangle$  at mean epoch. The mean values are unweighted. No star identifications are provided; hence, the user must select stars from the catalog and then identify them in other catalogs or on charts using the equatorial coordinates.

**Reference:**

Fresneau, A. 1983, *AJ*, 88, 1378

**File Information:** 2 files, 24.8 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Full documentation available

**ADC 1097**

Nikoloff, I., and Høg, E.

*Perth 75, A Catalogue of Positions of 2589 FK4 and FK4S Stars (1982)*

**Keywords:** *positional data; proper motions; meridian observations; fundamental stars*

**Description:** The catalog contains results of approximately 60000 photoelectric meridian circle observations made at the Perth Observatory for 1156 *FK4* and 1433 *FK4 Supplemental* stars south of declination  $+38^\circ$ . The catalog reports proper motions and positions at epoch and equinox B1950.0. The data used to derive the epoch 1950 positions are included in the catalog so that originally observed positions may be recomputed and used for geodetic purposes until the *FK5* becomes available. The mean error of an individual position in this catalog is  $0.07''$  in right ascension and  $0.13''$  in declination at a zenith distance of  $45^\circ$ , while the mean error of the PERTH 75 system is  $0.05''$  in right ascension and  $0.10''$  in declination. The positions do not contain the large systematic errors of the *FK4* (Frick and Kopff 1963), which can be, for example  $0.3''$  in right ascension for declination  $\leq 75^\circ$ . Data in the catalog include *FK4* or *FK4S* number, observed visual magnitude, spectral type used for computing refraction, right ascension and declination (equinox and epoch B1950.0), annual proper motion, observed residuals, numbers of accepted observations, and code to indicate if parallax and/or radial velocity has been used in computing apparent positions.

**References:**

Nikoloff, I., and Høg, E. 1982, Perth Observatory

Fricke, W., and Kopff, A. 1963, Veröff. Astron. Rechen-Inst. Heidelb., Nos . 10, 11

**File Information:** 2 files, 291 Kbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 1098A**

Luyten, W.J.

**New Luyten Catalogue of Stars with Proper Motions Larger than Two Tenths of an Arcsecond (1979, 1980)**

**Keywords:** *proper motions*

**Description:** The *NLTT* catalog is a collection of stars with proper motions exceeding  $0.18''/\text{yr}$  found by Luyten and his coworkers. The First Supplement to the *NLTT* catalog is the result of continued plate analysis and contains data for 398 stars with proper motions greater than  $0.179''/\text{yr}$ . A number of corrections to the data in the published catalog have been entered in the machine-readable version, including the omission of duplicate entries and those stars later determined to show no motion. The catalog contains, in addition to the proper motions, 1950 equatorial coordinates, a flag indicating the approximate accuracy of the positions, estimated red and photographic magnitudes, spectral types, and flags indicating a change from the published volume and the presence of the star in the supplement.

**References:**

Luyten, W.J. 1979, 1980, University of Minnesota

Warren Jr., W.H., Sturch, C.R., Jahreiß, H., Lasker, B.M., and Luyten, W.J. 1989, *AJ*, 97, 1480

**File Information:** 5 files, 4.29 Mbytes      **Status:** Has been checked for consistency  
 Available in microfiche version  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 1107**

Worley, C.E., and Douglass, G.G.

**Washington Catalog of Visual Double Stars 1984.0 (1984)**

**Keywords:** *double and multiple stars*

**Description:** The *Washington Visual Double Star Catalog, 1984.0 (WDS)* is the successor to the *Index Catalog of Visual Double Stars, 1961.0* (Jeffers and van den Bos 1963). The *WDS* covers the entire sky and is intended to contain all known visual double stars for which at least one differential measure was published through the end of 1983. It is not inclusive of all pairs which have been noted more casually, although some are included. The *WDS* contains 73610 double stars, counting components in the same multiple system as separate pairs. The 1900 coordinates in right ascension and declination, given to 0.1" and 1' is the primary identifier for each star. The catalog contains, in addition to the 1900 positions, J2000 positions; the discoverer, identified by a one-to three-letter code, and discoverer's number, if assigned; component identifications in multiple systems; the dates of the first and last observations of satisfactory accuracy; the number of measures of the pair (99 if more than 98); the position angles in degrees for the first and latest observation; and the distances in arcseconds and tenths for the first and latest positions. If there is no appreciable motion between these dates, only one set of position angle and separation is given. The catalog also contains the magnitude and spectral type of each component, the components of the proper motion, the *Durchmusterung* number, and the ADS number as well as an indication of the existence of a note and/or orbit. The three files contain an introduction, the main catalog, and the notes, respectively.

**References:**

Worley, C.E., and Douglass, G.G. 1984, U.S. Nav. Obs., Washington

Jeffers, H.M., and van den Bos, W.H. 1963, Index Catalogue of Visual Double Stars. 1961.0, Publ. Lick Obs., XXI

**File Information:** 3 files, 6.38 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Description for machine version

**ADC 1108**

Gill, D., and Kapteyn, J.C.

**Cape Photographic Durchmusterung (1895-1900)**

**Keywords:** *Durchmusterungen; surveys*

**Description:** The catalog is a photographic survey of southern stars in the declination zones  $-18^\circ$  to

-89°. The data include the sequential star number within a zone, photographic magnitude, position (right ascension, declination at equinox B1875), and occurrence of a star in certain other preceding catalogs. The limiting photographic magnitude is 10.5. The machine version was prepared by manual keypunching of the original data. Specific zones in the range  $-18^\circ$  to  $-35^\circ$  were punched, verified, and checked at Case Western Reserve University by and under the guidance of B. N. Rappaport, who used them as part of a dissertation on computer production of star charts. Mr. B.N. Rappaport, with financial support from the National Space Science Data Center, continued to oversee the punching and verification of the remaining zones by a commercial ADP firm. The data have been checked and scrutinized carefully by machine and manual checking. A statistical analysis predicts that there should be no more than a few hundred individual data errors in the entire tape version. Corrigenda from all published volumes have been incorporated, including nine supplemental stars, to increase the original 454868 stars to the present total. Deleted stars have not been removed in order that the individual zone star count remain equal to the published catalog; however, these stars have been flagged with a "D" in byte 11 and their data blanked out.

#### Reference:

Gill, D., and Kapteyn, J.C. 1895-1900, *Cape Ann.* 3-5

**File Information:** 2 files, 13.9 Mbytes      **Status:** Has been checked for consistency  
 Available in microfiche version  
 Available via network  
 Available in hard copy form  
 Full documentation available

**ADC 1113A**

**Boss, B.**

### General Catalogue of 33342 Stars for the Epoch 1950 (1937)

**Keywords:** *positional data; proper motions; fundamental catalog; fundamental stars*

**Description:** The *GC* is a catalog of standard positions and proper motions for (all) stars brighter than magnitude 7, extending from the north to south celestial poles. Several thousand additional stars promising to yield reasonably accurate proper motions were included in the catalog. The objectives of the work were to provide standard positions and motions of accuracy limited only by the character and abundance of the observational material upon which the data were based and thus to provide a rich supply of data to promote research in many astronomical fields. The machine version of the *GC* includes both *The Henry Draper Catalogue* and *Durchmusterung* identifications for all stars, although the published *GC* contains only one or the other. The 1985 version corrected many errors present in a previous machine version and included probable errors for the positions and centennial proper motions (not present in the previous version). In this version decimal points have been aligned for all but a very few of the secular variations and third terms. These quantities are given with the same precision as in the printed catalog, and the coded spectral types have been omitted. The following quantities are included in the machine but not the published version: galactic coordinates and DM numbers. The following data are in the published but not the machine version: centennial increments of proper motion in right ascension and declination, probable errors of the right ascension and declination at 1950.0, and remarks. The documentation supplied with the machine

catalog gives a byte-by-byte format description, indigenous catalog characteristics, code explanation tables, and changes incorporated to produce this and previous Astronomical Data Center versions.

**Reference:**

**Boss, B. 1937, Carnegie Inst. of Washington**

**File Information:** 5 files, 4.89 Mbytes      **Status:** Has been checked for consistency  
Available via network  
Full documentation available

**ADC 1114**

**Thome, J.M.**

**Córdoba Durchmusterung (1892-1932)**

**Keywords:** *surveys; Durchmusterungen*

**Description:** The catalog is a visual survey of southern stars in the declination zones  $-22^{\circ}$  to  $-89^{\circ}$ . The data include the sequential star number within a zone, estimated visual magnitude, position (right ascension, declination at equinox B1875) and occurrence of a star in certain other preceding catalogs. Stars having estimated visual magnitudes fainter than 10.0 are recorded as 10. This machine version was prepared by keypunching the entire main body of the catalog at the National Space Science Data Center over a period of about five years. No verification was done so as not to double the time. Individual zones were then processed to paper by software designed to reproduce the published catalog exactly. Volunteers from the U.S.A. and Australia then proofread zones manually, and the returned corrections were analyzed and incorporated. The corrigenda from all published *CD* volumes were then computerized, sorted, and incorporated. Deleted stars have not been removed in order that the zone star counts remain equal to the published catalog, but they have been flagged with a "D" in byte 11. Eight supplemental stars have been added from the corrigenda to increase the original 613951 stars to the present total. The machine version contains all data listed above except the occurrence of a star in preceding catalogs. It is ordered from north to south with the zones directly following one another in a completely uniform file.

**Reference:**

**Thome, J.M. 1892-1932, Resultados del Obs. Nac. Argentino 16, 17, 18, 21**

**File Information:** 2 files, 18.8 Mbytes      **Status:** Has been checked for consistency  
Available in microfiche version  
Available via network  
Available in hard copy form  
Full documentation available

**ADC 1119**

**Schönfeld, E.**

**Southern Durchmusterung (1886)**

**Keywords:** *surveys; Durchmusterungen*

**Description:** The catalog is a visual survey of stars in the declination zone  $-02^{\circ}$  to  $-23^{\circ}$ , completed by Schönfeld as a southern extension to the *Bonner Durchmusterung* (Argelander 1859-1862). The same methods used to compile the *BD* were used by Schönfeld; that is, the telescope was allowed to drift along the mean declination of each zone, and the positions and magnitudes of stars crossing the transit line of each field were recorded. Although the original goal of the project was to extend the *BD* southward with the same magnitude limits, since the primary telescope used was of larger aperture (159 mm) than the one used for the *BD* work (78 mm), the *SD* magnitude estimates extend to 9.9 instead of the 9.5-mag limit of the *BD*. However, the *SD* contains a rather large number of stars fainter than mag 10 and even occasionally goes to almost mag 11. Positions are given to the nearest 0.1s in right ascension and to the nearest 0.1" in declination. The *SD* was computerized through the collaborative efforts of the Centre de Données Astronomiques de Strasbourg and the Astronomical Data Center, NASA/GSFC. The catalog contains equatorial coordinates (B1855) used.

**References:**

Schönfeld, E. 1886, *Astron. Beob.* 8, Part IV

Argelander, F.W.A. 1859-1862, *Bonner Sternverzeichniss, erst bis dritte Sektion, Astron. Beobacht. auf der Sternwarte der Königl. Rhein, Friedrich-Wilhelms-Univ. zu Bonn, Bände 3-5*

**File Information:** 4 files, 4.20 Mbytes      **Status:** Has been checked for consistency  
 Available in microform versions  
 Available via network  
 Available in hard copy form  
 Full documentation available

**ADC 1122**

Argelander, F.W.

**Bonner Durchmusterung (1859-1862)**

**Keywords:** *surveys*; Durchmusterungen

**Description:** The catalog is a visual survey of stars in the declination zone  $+89^{\circ}$  to  $-01^{\circ}$ . The survey, completed by Argelander and his assistants in the years 1852-1861, was performed and the stars cataloged by allowing the telescope to drift along the mean declination of each zone and recording the and magnitudes of stars crossing the transit line of each field. The entire *BD* was computerized through the collaborative efforts of the Centre de Données Astronomiques de Strasbourg and the Astronomical Data Center, NASA/GSFC. The catalog contains an equatorial coordinate (equinox 1855) and estimated visual magnitude for every star visible with the 78-mm Bonn telescope.

**References:**

Argelander, F.W. 1859-62, *Bonner Sternverzeichnis. Erste bis dritte Sektion, Astron. Beobachtungen auf der Sternw. der Königlichen Rhein. Friedrich-Wilhelms-Univ. zu Bonn, Bände 3-5*

Küstner, F. 1903, *Bonner Durchmusterung des Nord. Himmels, zweite berichtigte Auflage, Bonn Univ. Sternw.*

Schmidt, H. 1968, *vierten Auflage, Ferd. Dummlers Verlag, Bonn*

**File Information:** 4 files, 10.2 Mbytes      **Status:** Has been checked for consistency  
 Available in microform versions  
 Available via network  
 Available in hard copy form  
 Full documentation available

**ADC 1129**

Murray, C.A., Argyle, R.W., and Corben, P.M.

**A Survey of Trigonometric Parallaxes and Proper Motions with the UK Schmidt Telescope - II. Astrometric and Photometric Data for a Complete Sample of 6125 Stars Brighter than  $B = 17.5$ ,  $V = 17.0$  in the South Galactic Cap (1986)**

**Keywords:** *south Galactic pole; trigonometric parallaxes; proper motions; regional catalog*

**Description:** The catalog contains 6125 stars brighter than  $B=17.5$ ,  $V=17.0$  in the south galactic cap. File 1 gives the astrometric and photometric data, and File 2 provides information regarding stellar luminosity, density, and kinematic distributions. The data have been obtained using the UK Schmidt telescope between 1975 and 1981. The plates were measured on the GALAXY machine at RGO. External errors of the parallaxes range between  $\pm 0.012''$  and  $\pm 0.017''$ , according to magnitude. Internal proper motion errors range from  $\pm 0.006''$  and  $\pm 0.008''$ . In addition to the positions, proper motions, and parallaxes, the photometric data include  $B$ ,  $V$ ,  $B-V$ ,  $R$ , and  $I$ .

**Reference:**

Murray, C.A., Argyle, R.W., and Corben, P.M. 1986, *MNRAS*, **223**, 629 and microfiche 223/1

**File Information:** 2 files, 793 Kbytes      **Status:** Is distributed as received  
 Available via network

**ADC 1131A**

SAO Staff

**Smithsonian Astrophysical Observatory Star Catalog (1966)**

**Keywords:** *positional data; proper motions*

**Description:** The machine-readable *SAO* catalog available from the Astronomical Data Center is based on an original binary version of the *Smithsonian Astrophysical Observatory Star Catalog* (SAO, SAO Staff 1966). Subsequent improvements by T. A. Nagy (1979) included the addition of equatorial coordinates in radians and cross identifications from the *Table of Correspondences SAO/HD/DM/GC* (Morin 1973). As a prelude to creation of the 1984 version of the *SAO*, a new version of the *SAO-HD-GC-DM Cross Index* was prepared (Roman, Warren, and Schofield 1983). The 1984 version of the *SAO* contained the corrected and extended cross identifications, all errata published up to January 1984 and known to the ADC, numerous errors forwarded to the ADC by colleagues, and errors discovered at the ADC during the course of this work. Clayton A. Smith of the U. S. Naval Observatory provided J2000.0 positions and proper motions for the *SAO* stars. Published and unpublished errors discovered in the previous version (1984) have been corrected (up to May 1991).

The catalog contains the *SAO* number; the right ascension and declination with a B1950.0 equinox and epoch; annual proper motion and its standard deviation, photographic and visual magnitudes; spectral type; references to sources; the *Durchmusterung* (DM) identifier if the star is listed in the *Bonner DM (BD)*, *Córdoba DM (CD)*, or *Cape Photographic DM (CP)*; component identification; *The Henry Draper (Extension) (HD or HDE)* number; and J2000 positions and proper motions. Multiple-star component identifications have been added to stars where more than one *SAO* entry has the same *DM* number. *The Henry Draper Extension (HDE)* numbers have been added for stars found in both volumes of the extension. Data for duplicate *SAO* entries (those referring to the same star) have been flagged. J2000 positions in usual units and in radians have been added.

#### References:

SAO Staff 1966, *Smithsonian Astrophysical Observatory 1966, Star Catalog, Positions and Proper Motions of 258,997 Stars for the Epoch and Equinox of 1950.0*, Pub. of the Smithsonian Institution of Washington, D.C. No. 4652 (Washington: Smithsonian Institution)

Morin, D. 1973, Table of Correspondences SAO/HD/DM/GC, Obs. de Meudon, unpublished

Nagy, T.A. 1979, Documentation for the Machine-Readable Version of the Smithsonian Astrophysical Observatory Catalog(ue) (EBCDIC Version), Systems and Applied Sciences Corporation R-SAW-7/79-34

**File Information:** 2 files, 50.5 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 1138**

Smith, C.A., et al.

### The Southern Reference Star Catalogue of 20488 Positions (1988)

**Keywords:** *fundamental catalog; positional data*

**Description:** The positions in *The Southern Reference Star Catalogue* are the combined results of observations of all participants in the Southern Reference Star (SRS) observing campaign from 1961 to 1973. Preliminary catalogs were compiled at both the U.S. Naval Observatory (Washington) and the Pulkova Observatory (Leningrad). The two compilations were compared, reconciled, and combined to render this catalog. The proper motions were culled from a number of sources and should not be regarded as part of the *SRS* observed catalog; they should not be used to extend the *SRS* system of positions very far from the mean epoch of the observations, which is about 1968. Two sets of positions and proper motions are given, referred to the Equator and equinox of B1950.0 and J2000.0, respectively.

In addition to a serial number, in order of right ascension, the positions, and the proper motions, the catalog contains the original *SRS* number in the observing list, a code to indicate the source of the proper motions, the *Durchmusterung* number, magnitude, spectral type, the mean error, number of observations, and mean epoch for right ascension and for declination, the number of catalogs in each coordinate in the Washington and in the Leningrad compilations, and the differences (*FK5-FK4*) from the coefficients of the analytical representation by H. Schwan.

**Reference:**

Smith, C.A., Jackson, E.S., Corbin, T.E., Hughes, J.A., Khrutskaya, E.V.,  
 Polojentsev, A.D., Polojentsev, D.D., Yagudin, L.I., and Zverev, M.S. 1988

**File Information:** 2 files, 3.29 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Description for machine version

**ADC 1141**

Yale University

**Yale Zone Catalogues - Integrated Version (1939-1983)**

**Keywords:** *positional data; proper motions*

**Description:** The catalog contains the various volumes of the Yale Zone Catalogues, which have been combined into a single, homogeneous machine-readable volume, sorted by position. In the late 1920s Yale University Observatory started to photograph the sky in large fields to determine positions and proper motions for stars in the Astronomische Gesellschaft (AG) zones. Most of the sky has now been measured and the positions and proper motions published in various volumes of the Transactions of the Yale University Observatory. Because the preparation of these volumes extended over a 44-year period, the format and the contents changed with the time. Hence, it appeared desirable for the ADC to create a single, uniform catalog that would contain most of the information and could be accessed by right ascension as well as by declination.

**Reference:**

Yale University 1939-1983, *Trans. Astron. Obs., Yale Univ.* 11-32

**File Information:** 12 files, 20.0 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 1143**

Fricke, W., and Kopff, A.

**Fourth Fundamental Catalogue and Supplement (1963)**

**Keywords:** *positional data; proper motions; fundamental catalog; fundamental stars*

**Description:** The *FK4* was an attempt to establish a fundamental system of stellar positions and proper motions for the 1950 equinox using as much position data as were available. Most of the stars are brighter than 7.0 mag. To increase the star density in some regions of the sky, positions and proper motions for additional stars were established on the same system. This catalog contains seven data files, six for different equinoxes (1950, 1955, 1960, 1965, 1970, and 1975) and one for the supplemental stars. The 1950 and 1975 files contain the complete *FK4* catalog (1535 stars); the others contain only 52 polar stars. In addition to a header record, the primary catalog contains for each star an identification number; the magnitude (maximum for a variable star); a variability flag,

the minimum magnitude for a variable or the magnitude of the secondary for a double star; the *HD* spectral type and the type for the companion or a second type for a variable star; the position and the change and acceleration of the position; the proper motion and its change with time; the mean epoch of the observations for both right ascension and declination; the standard deviations of the position and proper motion; the numbers of the star in the *Boss General Catalog*, the *N30* catalog, and in the *Durchmusterungs*; and the parallax. The supplement has a flag to indicate duplicity but no information about variability or the second component. It has no information about the temporal change of the position and proper motion and does not list the *N30* and *Durchmusterung* numbers. It also omits the mean epoch for the observations.

**Reference:**

Fricke, W., and Kopff, A. 1963, Veröff. Astron. Rechen-Inst., Heidelb., No. 10, 11

**File Information:** 8 files, 549 Kbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 1146**

Röser, S., and Bastian, U.

**Catalogue of Positions and Proper Motions (1988)**

**Keywords:** *positional data; proper motions*

**Description:** The *PPM (North)* gives J2000 positions and proper motions of 181731 stars north of  $-2.5^\circ$  declination. Its main purpose is to provide a convenient, dense, and accurate net of astrometric reference stars that represents the new IAU (1976) coordinate system on the sky. The mean epoch is near 1931. The average mean errors of the positions and proper motions are  $0.27''$  and  $0.43''/\text{cen}$ . On the average six measured positions are available per star; 1064 stars do not have sufficient redundancies to resolve discrepancies. In addition to the positions and proper motions, the *PPM (North)* contains the *BD* number; the magnitude; the spectral type; the number of positions included; the mean error of each component of the position and proper motion; the weighted mean epoch in each coordinate; the numbers in the *SAO*, *HD*, and *AGK3* catalogs; and various standard notes. In addition, a number of individual notes are given in the introduction.

**Reference:**

Röser, S., and Bastian, U. 1988, *A&AS*, 74, 449

**File Information:** 2 files, 23.1 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Description for machine version

**ADC 1149A**

Fricke, W., Schwan, H., and Lederle, T.

**Fifth Fundamental Catalogue (FK5), Part I. The Basic Fundamental Stars (1988)**

**Keywords:** *fundamental catalog; positional data; proper motions; fundamental stars*

**Description:** The basic *FK5* provides improved mean positions and proper motions for the 1535 classical fundamental stars that had been included in the *FK3* and *FK4* catalogs. The machine version of the catalog contains the positions and proper motions of the basic *FK5* stars for the epochs and equinoxes J2000.0 and B1950.0, the mean epochs of individual observed right ascensions and declinations used to determine the final positions, the mean errors of the final positions and proper motions for the reported epochs, V magnitudes on the UBV system, one-dimensional spectral types, trigonometric parallaxes, radial velocities, and cross identifications to designations used in *The Henry Draper Catalogue*, the *Durchmusterungen*, and the *Boss General Catalogue*.

**Reference:**

Fricke, W., Schwan, H., and Lederle, T. 1988, Veröff. Astron. Rechen-Inst., Heidelb., No. 32

**File Information:** 2 files, 321 Kbytes      **Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 1152**

Klemola, A.R., Morabito, L., and Taraji, H.

**Jupiter-Voyager Reference Star Catalogue (1978)**

**Keywords:** *photographic magnitudes; photovisual magnitudes; positional data; zodiacal regions*

**Description:** The catalog was prepared for purposes of determining up-to-date, reasonably accurate equatorial coordinates for reference stars in a band of sky against which cameras of the Voyager spacecraft were aligned for observations of Jovian satellites during the Jupiter flyby. The catalog contains accurate equatorial coordinates for equinox 1950.0, epoch 1978.27, photographic and visual magnitudes, *AGK3* identifications and proper motions for 4983 stars. All of the reference stars are in the range  $6^h00^m$  to  $8^h04^m$  in right ascension (1950), declination zones  $+16^\circ$  to  $+23^\circ$ , and  $8^h31^m$  to  $8^h57^m$ , zones  $+08^\circ$  to  $+14^\circ$ . Mean errors of the positions are about  $0.4''$ .

**Reference:**

Klemola, A.R., Morabito, L., and Taraji, H. 1978, Lick Observatory

**File Information:** 1 file, 272 Kbytes      **Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 1153**

Klemola, A.R., Taraji, H., and Ocampo, A.

**Saturn-Voyager Reference Star Catalogue (1979)**

**Keywords:** *photographic magnitudes; photovisual magnitudes; positional data; zodiacal regions*

**Description:** The catalog was prepared for purposes of determining up-to-date, reasonably accu-

rate equatorial coordinates for reference stars in a band of sky against which cameras of the Voyager spacecraft were aligned for observations in the region of Saturn during the flyby. The catalog contains accurate equatorial coordinates for equinox 1950.0, epoch 1978.92, photographic and visual magnitudes, *AGK3* or *SAO* identifications, and proper motions for 4551 stars. All of the reference stars are in the range  $12^h40^m$  to  $14^h12^m$  in right ascension (1950) and declination zones  $+02^\circ$  to  $-09^\circ$ . Mean errors of the positions are about  $0.25''$ .

**Reference:**

Klemola, A.R., Taraji, H., and Ocampo, A. 1979, Lick Observatory

**File Information:** 1 file, 248 Kbytes      **Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 1157**

Douglass, G.G., and Harrington, R.S.

**The U.S. Naval Observatory Zodiacal Zone Catalog (1990)**

**Keywords:** *positional data; proper motions*

**Description:** The catalog provides positions and proper motions at equinox and epoch J2000.0, on the *FK5* system, for stars in the magnitude range 4-10, lying within  $16^\circ$  of the ecliptic and north of declination  $-30^\circ$ . In order that references to earlier catalogs can be made, the B1950.0 positions and proper motions are given in both the *FK5* and the *FK4* systems. Other useful information, such as visual magnitudes and spectral types, is also provided. Stellar identification is strictly by *Durchmusterung* number, and the catalog is ordered by J2000.0 right ascension. It is important to understand that the present catalog does not cover the entire zodiacal zone, since stars south of zone  $-29^\circ$  could not be observed from the Washington site. These will be observed from the USNO Black Birch station in New Zealand commencing in 1991.

**Reference:**

Douglass, G.G., and Harrington, R.S. 1990, *AJ*, 100, 1712

**File Information:** 1 file, 4.07 Mbytes      **Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 1159A**

Bastian, U., et al.

**Catalogue of Positions and Proper Motions - South (Preliminary Version 4.91)  
(1991)**

**Keywords:** *positional data; proper motions*

**Description:** The catalog contains 144787 stars south of  $-2.5^\circ$  declination. There is a continuous transition with the northern catalog with no gaps or double entries. The main purpose of the catalog is to provide an accurate, dense, and convenient net of astrometric reference stars in the Southern

Hemisphere on the *FK5* system. The catalog gives positions for a standard epoch (J2000) and a standard coordinate system (mean equator and equinox for J2000 in the new IAU [1976] system of astronomical constants). The mean error in the position is about  $0.12''/\text{cen.}$ ; for the proper motions it is about  $0.40''/\text{cen.}$  The catalog contains in addition to J2000 positions and proper motions, the DM number, magnitude, spectrum, number of individual published positions used to compute the positions and proper motions, the mean errors of the positions and motions, the weighted mean epoch of the measured positions for both right ascension and declination, and the number in the *SAO* and *HD* catalogs.

**Reference:**

Bastian, U., Röser, S., Nesterov, V.V., Polozhentsev, D.D., Potter, Kh.I., Wielen, R., Yagudin, L.I., and Yatskiv, Ya. S. 1991, *A&AS*, 87, 159

**File Information:** 2 files, 18.4 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Description for machine version

**ADC 1167**

Yoshizawa, M., and Suzuki, S.

**The Tokyo PMC Catalog 86: Catalog of Positions of 3974 Stars Observed in 1986 with Tokyo Photoelectric Meridian Circle (1989)**

**Keywords:** *meridian observations; positional data*

**Description:** The second annual catalog of the Tokyo Photoelectric Meridian Circle contains 3974 stars that were observed at least twice between 21 December 1985 and 31 December 1986. Specifically, it contains 1141 *FK5* stars, 971 *FK4* supplemental stars, 554 *AGK3R* stars, 403 OB stars, 421 NPZT stars, and 484 *SAO* stars. The positions are for the mean epoch of observation referred to the equinox and equator of J2000.0 and based on the *FK5* system. The internal error of a single observation for the bright stars is  $0.24''$  and  $0.27''$  in right ascension and declination, respectively. The catalog contains, in addition to the positions, the catalog from which the star is taken and the number in that catalog, the mean epoch and number of observations of each component of the position and of the magnitude, the spectral type, the V magnitude, and the *DM* and *AGK3* numbers. It also contains the residuals between the position in this catalog and that in the source catalog and mean errors for each component of the position and of the magnitude.

**Reference:**

Yoshizawa, M., and Suzuki, S. 1989, *Publ. Natl. Astron. Obs. Jpn.*, 1, 127

**File Information:** 2 files, 527 Kbytes      **Status:** Has been checked for consistency  
 Available via network  
 Description for machine version

**ADC 1169**

Argue, A.N., et al.

**A Catalog of Selected Compact Radio Sources for the Construction of an Extragalactic Radio/Optical Reference Frame (1984)****Keywords:** *positional data; radio sources*

**Description:** The catalog contains data for the construction of an extragalactic radio/ optical reference frame. Astrometric data for 233 compact radio sources having identified optical counterparts are given. The data listed for each source are source identification, equatorial position (J2000.0), mean positional errors, object classification (galaxy, BL Lacertae object, QSO), visual magnitude, redshift, 5-GHz flux density, and observation and remarks codes. The data were computerized at the Astronomical Data Center, NASA/GSFC.

**Reference:**

Argue, A.N., de Vegt, C., Elsmore, B., Fanselow, J., Harrington, R.S. , Hemenway, P., Johnston, K.J., Kühr, H., Kumkova, I.I., Niell, A.E., Walter, H .G., and Witzel, A. 1984, *A&A*, 130, 191

**File Information:** 1 file, 20.5 Kbytes**Status:** Has been checked for consistency

Documentation in hard copy form only

Available via network

**ADC 1171**

Corbin, T.E., and Urban, S.E.

**Astrographic Catalog Reference Stars (1991)****Keywords:** *positional data; proper motions*

**Description:** The *ACRS* is an all-sky catalog of positions and proper motions that is based on the *AGK3* in the north and on the newly completed second *Cape Photographic Catalogue (CPC2)*, (de Vegt et al. 1989) in the south. The astrometric data are on the system of the International Reference Stars (IRS), compiled on B1950.0 *FK4* and then transformed to J2000.0 *FK5*. The *ACRS* contains 320111 stars, the mean positions for which were derived from a total of 1,643,783 individual input positions. The catalog is divided into two parts. Part 1 contains stars having better observational histories and, therefore, more reliable positions and proper motions, while the stars in Part 2 have poor histories and consist mostly of objects for which only two catalog positions in one or both coordinates were available for computing proper motions. For Part 1, which consists of 78% of the catalog, the mean errors of the proper motions in right ascension and declination are 0.47"/century and 0.46"/century, respectively. It is intended that, as more observations are accumulated for stars in Part 2, they will be migrated to Part 1. The catalog was compiled at the U. S. Naval Observatory, Washington, D.C., for purposes of performing new reductions of the *Astrographic Catalogue* plates. Additional details about the construction of the *ACRS* may be found in Corbin and Urban (1989). The data included are catalog part, *ACRS* number, equatorial coordinates (equinox, equator, epoch B1950.0 and J2000.0), centennial proper motions (B1950.0 and J2000.0), original epochs, weights for right ascension and declination, and reference data such as *DM* numbers (*BD*, *CD*, *CPD*), *AGK3*

and *CPC2* designations, and an IAU recommended *ACRS* identifier (based on coordinates).

#### References:

**Corbin, T.E., and Urban, S.E. 1991, U.S. Nav. Obs.**

Corbin, T.E., and Urban, S.E. 1989, in *Star Catalogues: A Centennial Tribute to A. N. Vyssotsky* (Schenectady, L. Davis Press), p. 59

de Vegt, Ch., Zacharias, N., Murray, C.A., and Penston, M.J. 1989, in *Star Catalogues: A Centennial Tribute to A. N. Vyssotsky* (Schenectady, L. Davis Press), p. 45

**File Information:** 5 files, 58.7 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 1172**

**Corbin, T.E.**

### International Reference Stars (IRS) (1991)

**Keywords:** *positional data; proper motions*

**Description:** The *IRS* is an all-sky catalog of positions and proper motions that is based on the *AGK3R* (Corbin 1977, 1978) in the Northern Hemisphere and on the newly completed *SRS* (Smith et al. 1990) in the south. The data for the 36027 stars of the *IRS* were compiled in B1950.0 *FK4* and then transformed to J2000.0 *FK5*. The *IRS* was compiled by matching 122 meridian circle catalogs with the *AGK3R* and *SRS* to provide the data base. Catalogs whose stars had been observed using screens to minimize the magnitude equation and that contained *FK4* (Fricke and Kopff 1963) stars were used to form a preliminary system. These catalogs were reduced to the *FK4* by direct comparison; the resulting positions and proper motions were then used to reduce all of the other catalogs. Thus, the *IRS* is a differential catalog compiled from 164,917 positions reduced to the *FK4* system. The *IRS* is divided into two parts. Part 1 contains the stars having better observational histories and, therefore, more reliable positions and proper motions. This part constitutes 81% of the catalog; mean errors of the proper motions are 0.43"/century and 0.44"/century in right ascension and declination, respectively. The stars in Part 2 have poor observational histories and consist mostly of objects for which only two catalog positions in one or both coordinates were available when the proper motions were computed. Where accuracy is the primary consideration, it is best to use only the stars in Part 1, while if the highest possible density is desired, the two parts should be combined, as they are systematically the same. The data included are catalog part, *IRS* number, equatorial coordinates (equinox, equator, epoch B1950.0 and J2000.0), centennial proper motions (B1950.0 and J2000.0), original epochs, weights for right ascension and declination, and reference data such as DM numbers (*BD*, *CD*, *CPD*), *AGK3* and *CPC2* designations, and an IAU-recommended *IRS* identifier (based on coordinates).

#### References:

**Corbin, T.E. 1991, U.S. Nav. Obs.**

Corbin, T.E. 1977, *The Proper-Motion System of the AGK3R* (Ann Arbor, University Microfilms, Inc.)

Corbin, T.E. 1978, in IAU Colloquium 48, Modern Astrometry, ed. F.V. Prochazka and R.H. Tucker (Vienna, University Obs.), p. 505

Fricke, W., and Kopff, A. 1963, Fourth Fundamental Katalog (FK4), Veröff. Astron. Rechen-Inst. Heidelb. No. 10

Smith, C.A., Corbin, T.E., Hughes, J.A., Jackson, E.S., Krutskaya, E.V., Polozhentsev, A.D., Polozhentsev, D.D., Yagudin, L.I., and Zverev, M.S. 1990, in IAU Symposium No. 141, Inertial Coordinate System on the Sky, ed. J.H. Lieske and V.K. Abalakin (Dordrecht, Reidel), p.457

**File Information:** 5 files, 6.66 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 1174**

van Altena, W.F., Lee, J.T., and Hoffleit, D.

The General Catalogue of Trigonometric Stellar Parallaxes, Preliminary  
 Version (1991)

**Keywords:** *trigonometric parallaxes*

**Description:** The preliminary edition of the *General Catalogue of Trigonometric Stellar Parallaxes*, containing 15349 parallaxes for 7879 stars, has been prepared at the Yale University Observatory. In this edition 1480 stars have been added to those contained in the previous edition of the catalog by Jenkins (1952, 1963). This relatively small increase in the number of stars is more than compensated for by the increased accuracy of the newer trigonometric parallaxes. The authors have attempted to include here all trigonometric parallaxes made available to them by March 1991 and will provide for each listed parallax in the final version the reference to its source of publication. For each star it lists the equatorial coordinates for B1900 and the secular variation for 100 years, the proper motion in  $x$  and  $y$ , the weighted average absolute parallax and its standard error, the number of parallax observations, the quality of interagreement among the different values, the visual magnitude, and various cross identifications with other catalogs. The B1900 equinox has been maintained to avoid assigning yet another star number. Ancillary information, including UBV photometry, MK spectral types, data on the variability and binary nature of the stars, orbits when available, and miscellaneous information to aid in determining the reliability of the data, will be listed in the final version. The relative parallaxes are corrected to absolute parallax using newly computed corrections that are based on an improved model of the galaxy. An analysis of the resulting absolute parallaxes has been made to study the accidental and systematic errors of the parallaxes. The results of that investigation are used to arrive at a weighting system for the catalog, which then yields weighted absolute parallaxes for each star. The weighting system is still under investigation; therefore, the weighted parallaxes may change a bit in the final version. Printed copies of the catalog will be available from the Yale University Observatory when the work has been completed (late 1993?).

**References:**

van Altena, W.F., Lee, J.T., and Hoffleit, D. 1991, Yale University Observatory

Jenkins, L.F. 1952, 1963, General Catalogue of Trigonometric Stellar Parallaxes (New Haven, Yale University Observatory)

**File Information:** 2 files, 1.58 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Description for machine version

**ADC 1175**

Fricke, W., Schwan, H., and Corbin, T.E.

**Fifth Fundamental Catalogue (FK5), Part II. The FK5 Extension (1991)**

**Keywords:** *fundamental catalog; positional data; proper motions; fundamental stars*

**Description:** An extension of the *FK5*, this machine-readable catalog provides improved mean positions and proper motions at equinoxes and epochs J2000.0 and B1950.0 for the 3117 new fundamental stars. Cross identifications to the numbering systems of the *AGK3R*, *SRS*, *HD*, *DM*, and *GC* catalogs are included. More than 200 catalogs providing star positions obtained from throughout the world have been used in the compilation of the *FK5 Extension*. The primary purpose of this catalog is to extend the original *FK5* basic catalog to about mag 9.5.

**Reference:**

Fricke, W., Schwan, H., and Corbin, T.E. 1991, Veröff. Astron. Rechen-Instit. Heidelberg, No. 33

**File Information:** 2 files, 614 Kbytes      **Status:** Has been checked for consistency  
 Available via network  
 Full documentation available

**ADC 1176**

Bucciarelli, B., et al.

**The AGK3U: An Updated Version of the AGK3 (1992)**

**Keywords:** *positional data; proper motions*

**Description:** The *AGK3U* is a updated version of the *AGK3* catalog in which new positions from the Palomar "Quick V" survey have been added to improve the *AGK3* proper motions. It provides FK4/B1950.0 positions and proper motions for 170464 stars north of  $-2.5^\circ$  declination, at an average epoch of 1950.62. The proper motions have a two dimensional formal mean error of  $0.82''/\text{cen}$ . In addition to the positions and proper motions, the catalog contains the *AGK3* number, the mean errors of the positions and proper motion in each coordinate, the photographic magnitude, the spectral type, and the Palomar plate position, epoch, and mean error.

**Reference:**

Bucciarelli, B., Daou, D., Lattanzi, M.G., and Taff, L.G. 1992, *AJ*, 103, 1689

**File Information:** 2 files, 30.2 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Description for machine version

**ADC 1179**

Working Group of CGSC

**The Chinese Geodetical Stars Catalogue (CGSC) (1992)****Keywords:** *fundamental catalog; positional data; fundamental stars*

**Description:** *The Chinese Geodetic Stars Catalogue* includes 4065 stars brighter than 6.6 mag north of declination  $-30^\circ$ . It contains 2226 *FK5* and *FK4* supplemental stars and 1839 *GC* stars. The positions of 1391 *GC* stars were determined from observations with four Chinese instruments, reduced to the *FK5* system and the equinox and equator of J2000. The mean epoch of observation is 1988.0. The mean precisions are 4 ms and  $0.07''$  in right ascension and declination, respectively. The proper motions have been determined using the observing positions of 1391 *GC* stars and eight catalogs; the mean precisions are  $0.19''/\text{cen.}$  and  $0.22''/\text{cen.}$  in right ascension and declination, respectively. The positions of the other *GC* stars are obtained from other catalogs. In addition to the positions and proper motions, the catalog contains the visual magnitude, spectral type, parallax, radial velocity, and *Durchmusterung* number for each star, the mean epoch for the observations in each coordinate, and the mean error for each component of the position and proper motion.

**Reference:**

Working Group of CGSC 1992, Beijing, Yunnan, Shanghai and Shaanxi Astron. Obs.

**File Information:** 2 files, 523 Kbytes**Status:** Has been checked for consistency

Available via network

Description for machine version

**ADC 1184C**

Batrakov, Yu.V., and Shor, V.A.

**Catalogue of Orbital Elements and Photometric Parameters of 4646 Minor Planets Numbered by November 2, 1990 (1992)****Keywords:** *minor planets*

**Description:** This catalog contains the orbital elements and photometric parameters of 4646 permanently numbered minor planets. Most information in this catalog has been compiled by the BESM-6 computer of the Institute of Theoretical Astronomy. All of the orbital data were transformed to the *FK5*/J2000 system using the procedure recommended by the Commission 20 Ad Hoc System Transition Committee. Data include minor planet number, epoch, mean anomaly, argument of perihelion, node, inclination to the ecliptic, eccentricity, mean daily motion, absolute magnitude, and slope parameter.

**References:**Batrakov, Yu.V., and Shor, V.A. 1992, *Inst. Theor. Astronomy, St. Petersburg, Russia*

Ephemerides of Minor Planets/Ephemeridy Malykh Planet for 1992, Leningrad, Nauka, 1991 (pp. 24-109, Table Elements and Table Lost Minor Planets)

**File Information:** 2 files, 819 Kbytes      **Status:** Is distributed as received  
 Available via network  
 Description for machine version

**ADC 1188**

Yoshizawa, M., Suzuki, S., and Soma, M.

**The Tokyo PMC Catalog 88: Catalog of Positions of 3800 Stars Observed in 1988  
 and Planetary Positions Observed in 1986 to 1988 with Tokyo Photoelectric  
 Meridian Circle (1992)**

**Keywords:** *meridian observations; positional data*

**Description:** The fourth annual catalog of the Tokyo PMC contains J2000 positions for 3800 stars observed at least twice in 1988 with the Tokyo photoelectric meridian circle (Parts I and II). The coordinates are those for the mean epoch of the observations. Part III contains positions for five major and nine minor planets observed in 1986, 1987, and 1988 on the same systems as the stellar observations in the *Tokyo PMC Catalogs* 86, 87, and 88, respectively. In addition to the positions for stars, the catalog contains the star name in other catalogs, visual magnitude from other catalogs, spectral type, mean epoch of observation for right ascension and declination, the correction to be added to each position at mean epoch, the number of observations of each coordinate, the mean error of each, the observed magnitude at mean epoch and its mean error, the *DM* number, and the *AGK* number. For planets the catalog contains the name of the planet, a sequential observation number for each planet, the Julian and calendar date for each observation, the apparent right ascension and declination, the correction for each coordinate and the magnitude, the phase correction applied in each coordinate, and the observed magnitude.

**Reference:**

Yoshizawa, M., Suzuki, S., and Soma, M. 1992, *Publ. of the Natl. Astron. Obs. of Jpn.*, Vol. 2, No. 3, 475

**File Information:** 3 files, 586 Kbytes      **Status:** Has been checked for consistency  
 Available via network  
 Description for machine version

**ADC 1191**

Turon, C., et al.

**The Hipparcos Input Catalogue (1992)**

**Keywords:** *photometry; positional data; proper motions*

**Description:** *The Hipparcos Input Catalogue* contains up-to-date information on positions, proper motions, magnitudes, and colors, and when available, spectral types, radial velocities, multiplicity, and variability information for 118000 stars. The list is complete for limiting magnitudes  $\leq 7.9 + 1.1 \sin(b)$  for spectral types earlier than or equal to G5;  $7.3 + 1.1 \sin(b)$  for spectral types later than G5. If no spectral types were available, a B-V color of 0.8 mag was used for the cut-off. These comprise of 52000 "bright" stars. Additional stars were added to give reasonably regular sky density,

adequate position accuracy for most of the stars, and suitable data for statistical uses. No stars are fainter than 13.0; few are fainter than 12.0. The positions are good to 1.5'' at 1990, and the B or V magnitudes are good to 0.5 mag.

**Reference:**

Turon, C., Cr ez e, M., Egret, D., G omez, A., Grenon, M., Jahrei , H., R equi me, Y., Argue, A.N., Bec-Borsenberger, A., Dommanget, J., Mennessier, M.O., Arenou, F., Chareton, M., Crifo, F., Mermilliod, J.C., Morin, D., Nicolet, B., Nys, O., Pr evot, L., and Rousseau, M. 1992, ESA SP-1136; CDS Bull. No. 41, p. 9

**File Information:** 5 files, 53.2 Mbytes      **Status:** Is distributed as received  
 Available via network  
 Description for machine version

**ADC 1192**

Pakulyak, L.K.

**The Astrometric Standard Region Near the North Galactic Pole: A Catalogue of Positions and Proper Motions of 3196 Stars (1992)**

**Keywords:** *north Galactic pole; positional data; proper motions*

**Description:** The catalog of 3196 star positions and 1561 proper motions covers 26  in the Coma Cluster and includes objects to 15 mag. It is centered on right ascension (1984.2) = 12<sup>h</sup>24<sup>m</sup>, declination (1984.2) = +26 . The average star density is 84 stars/square degrees. The accuracies of the positions, proper motions, and B magnitudes are 0.19'', 0.003''/a, and 0.2 mag, respectively. The catalog contains 3196 records giving positions, proper motions, and B magnitudes.

**Reference:**

Pakulyak, L.K. 1992, CDS Bull. No. 41, p. 21

**File Information:** 2 files, 207 Kbytes      **Status:** Has been checked for consistency  
 Available via network  
 Description for machine version

**ADC 1196**

Turon, C., et al.

**The Hipparcos Input Catalogue, Version 2 (1993)**

**Keywords:** *photometry; positional data; proper motions*

**Description:** *The Hipparcos Input Catalogue, Version 2* contains up-to-date information on positions, proper motions, magnitudes, and colors, and, when available, spectral types, radial velocities, multiplicity, and variability information for 118000 stars. The list is complete for limiting magnitudes  $\leq 7.9 + 1.1 \sin(b)$  for spectral types earlier or equal to G5;  $7.3 + 1.1 \sin(b)$  for spectral types later than G5. If no spectral types were available, a B-V color of 0.8 mag was used as the cut-off. These comprise 52000 "bright" stars. Additional stars were added to give reasonably regular sky density,

adequate position accuracy for most of the stars, and suitable data for statistical uses. No stars are fainter than 13.0; few are fainter than 12.0. The positions are good to 1.5" at 1990, and the B or V magnitudes are good to 0.5 mag. Some data and identification errors were detected in Version 1; these errors have been corrected in this version (Turon et al. 1993).

**Reference:**

Turon, C., Cr ez e, M., Egret, D., G omez, A., Grenon, M., Jahrei , H., R equi me, Y., Argue, A.N., Bec-Borsenberger, A., Dommaget, J., Mennessier, M.O., Arenou, F., Chareton, M., Crifo, F., Mermilliod, J.C., Morin, D., Nicolet, B., Nys, O., Pr evot, L., and Rousseau, M. 1993, CDS Bull. No. 43, p. 5

**File Information:** 6 files, 53.2 Mbytes      **Status:** Is distributed as received  
 Available via network  
 Description for machine version

**ADC 1197**

Egret, D., et al.

**The Tycho Input Catalogue (1992)**

**Keywords:** *astrometric data; magnitudes; positional data*

**Description:** This *Tycho Input Catalogue* of 3,000,000 stars brighter than  $V=12.1$  has been prepared for the needs of the Tycho mission (Hipparcos satellite). This catalog results from the cross-matching of a subset of the *Hubble Space Telescope Guide Star Catalog* with the Hipparcos INCA data base and contains the positions of 3,154,302 objects. Data include the region number and sequential number in the region, coordinates J2000.0, epoch 1990, B and V magnitudes, errors in the position and magnitudes, and flags indicating various characteristics. An auxiliary file cross matches this file with the *Hipparcos Input Catalogue* and the INCA data base.

**Reference:**

Egret, D., Didelon, P., McLean, B.J., Russell, J.L., and Turon, C. 1992, *A&A*, 258, 217

**File Information:** 6 files, 253 Mbytes      **Status:** Is distributed as received  
 Available via network  
 Description for machine version

**ADC 1199**

Klemola, A.R., Hanson, R.B., and Jones, B.F.

**Lick Northern Proper Motion Program: NPM1 Catalog (1993 )**

**Keywords:** *positional data; proper motions; photographic magnitudes; colors; cross identifications*

**Description:** The *NPM1* catalog is the first part of the Lick Northern Proper Motion (NPM) program to measure absolute proper motions, on an inertial system defined by some 50000 faint galaxies, for some 300000 stars over a blue apparent magnitude range from 8 to 18. There are 1246  $6^\circ \times 6^\circ$  fields in the NPM survey (to declination  $-23^\circ$ ). The *NPM1* catalog covers the 72% of the northern

sky lying outside the Milky Way and contains some 149000 stars from measures in 899 of the 1246 NPM fields. A second catalog (*NPM2*) will cover the NPM Milky Way fields. The Yale Southern Proper Motion (SPM) program will complete the southern sky. Each NPM field was photographed at two epochs between 1947 and 1988. The mean first and second epochs are 1950 and 1977; the average epoch difference is 27 years. The first-epoch plates were taken in the blue only; both blue and yellow plates were taken at the second epoch. Some 94000 stars were chosen anonymously for the NPM astrometric reductions and for statistical studies of stellar motions. In addition, the *NPM1* catalog contains some 28000 positional reference stars, and some 27000 stars were chosen from the Lick Input Catalog of Special Stars (ICSS). Positions are given for equinox B1950 and computed epoch 1950. Each star's entry includes the absolute proper motion and blue magnitude. For 97% of the stars, the color is also given. Other data given for each star are: the original mean epoch, a stellar class code, the number of NPM fields measured, and discrepancy flags for position, proper motion, and photometry. Finally, as an additional identification, the *AGK3* (north) or *SAO* (south) number (if any) is given. The rms errors of the NPM absolute proper motions are about 0.5"/cent in each coordinate. The rms position errors at the catalog epoch 1950 average about 0.15" in each coordinate. The rms errors for the NPM photographic photometry average about 0.2 mag in B, and 0.15 mag in B-V.

**Reference:**

Klemola, A.R., Hanson, R.B., and Jones, B.F. 1993, *AJ* (in preparation)

**File Information:** 2 files, 12.0 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Full documentation available

**ADC 1200**

Klemola, A.R., Hanson, R.B., and Jones, B.F.

**Lick Northern Proper Motion Program: NPM1 Reference Galaxies (1993)**

**Keywords:** *galaxy catalogs; positional data; photographic magnitudes*

**Description:** The *Lick Northern Proper Motion (NPM)* program measured proper motions, positions, and photographic photometry for some 149000 stars (*NPM1 Catalog*) covering the sky outside the Milky Way north of declination 23°. The *NPM1* proper motions were measured with respect to an absolute reference frame defined by some 50000 faint galaxies (mostly  $16 < B < 18$  mag). The rms position errors for the *NPM1* reference galaxies average 0.2". The rms errors for the B magnitudes average 0.25 mag.

**Reference:**

Klemola, A.R., Hanson, R.B., and Jones, B.F. 1993, *AJ* (in preparation)

**File Information:** 2 files, 2.23 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Full documentation available

## 3.2 Photometric Data

**ADC 2002B**

Neugebauer, G., and Leighton, R.B.

### Two-Micron Sky Survey (1969)

**Keywords:** *infrared photometry; surveys*

**Description:** The catalog, giving sources of emission in the  $2.2 \mu$  region for more than 5000 stars, represents a systematic survey of the Northern Hemisphere for stars brighter than third magnitude. The survey was carried out with a telescope at Mount Wilson, California, having a 62-inch diameter and an f/1 aluminized epoxy mirror mounted equatorially. Radiation at an effective wavelength of  $2.2 \mu$  was detected by a lead sulfide photoconductive cell cooled by liquid nitrogen. In addition to the  $2.2 \mu$  detector array, radiation at an effective wavelength of  $0.84 \mu$  was detected by a simple silicon photovoltaic cell. The catalog includes right ascension and declination (B1950.0), K and I magnitudes, number of measurements, V magnitude, spectral types, cross identifications to the numbering systems of the *General Catalogue*, the *Durchmusterung* catalogs, *The Bright Star Catalogue*, and star names.

**References:**

Neugebauer, G., and Leighton, R.B. 1969, NASA SP-3047

Boss, B. 1937, General Catalogue of 33342 Stars for the Epoch 1950, Carnegie Inst. of Washington

Hoffleit, D. 1964, The Bright Star Catalogue, 3rd Revised Edition (New Haven: Yale University Observatory)

**File Information:** 5 files, 1.90 Mbytes

**Status:** Has been checked for consistency  
 Restricted microform version  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 2007A**

Morel, M., and Magnenat, P.

### UBVRIJKLMNH Photoelectric Photometric Catalogue (1978)

**Keywords:** *UBVRIJKLMNH photometry*

**Description:** The catalog contains the results from star brightness measures in the first ten (UBVRIJKLMN) broad wavelength bands (Johnson 1965) and the additional bandpass H (Johnson et al. 1968). Data in the above system that have been published up to June 1977 are included. The source reference (Morel and Magnenat 1978) states that there are 5943 entries in the data set with data for 4494 stars. However, a count of the records by coded number shows that there are only 4486 unique entries (not 4494). The catalog includes coded identification numbers (Geneva system), 11 magnitudes, numbers of measurements in each filter, and references.

**References:**

- Morel, M., and Magnenat, P. 1978, *A&AS*, 34, 477  
 Johnson, H.L. 1965, *ApJ*, 141, 923  
 Johnson, H.L., McArthur, J.W., and Mitchell, R.J. 1968, *ApJ*, 152, 465

**File Information:** 3 files, 807 Kbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 2021A**

Haeggkvist, L., and Oja, T.

**Narrow-Band Photometry of Late-Type Stars (1970)**

**Keywords:** *narrow-band photometry; late-type stars*

**Description:** The catalog is a compilation of photoelectric photometry obtained as part of a program investigating the distribution of stars and stellar matter perpendicular to the galactic plane. The machine-readable version contains identifications, previously published V, B-V, and U-B; the newly determined photoelectric classifications  $m_{4508}$ ,  $g_c$ ,  $c_c$ , and remarks for 629 late-type stars.

**Reference:**

- Haeggkvist, L., and Oja, T. 1970, *A&AS*, 1, 199

**File Information:** 1 file, 33.2 Kbytes      **Status:** Has been checked for consistency  
 Documentation in hard copy form only  
 Available via network

**ADC 2036**

Warren Jr., W.H., and Hesser, J.E.

**Catalogue of Individual UBV and uvby-beta Observations in the Region of the Orion OB 1 Association (1977)**

**Keywords:** *uvby photometry, beta; UBV photometry; colors; stellar associations; regional catalog*

**Description:** The catalog presents individual UBV observations of 106 stars in the vicinity of the Orion Nebula (the Sword region) and individual uvby and beta observations of 508 stars in all regions of the Orion OB 1 association. For the UBV data the stars are identified by their Brun (1935) numbers with cross identifications to the chart numbers used in Warren and Hesser (1977); the uvby and beta stars are identified by the aforementioned chart numbers and *HD*, *BD*, or *P* (Parenago 1954) numbers in that order of preference. The catalog includes identifications, the V magnitudes, B-V, U-B color indices, and UT dates of observation for the UBV data; and identifications: V magnitudes; b-y, m1, c1, and beta color indices; and UT date of observation for the uvby, beta data.

**References:**

- Warren Jr., W.H., and Hesser, J.E. 1977, *ApJS*, **34**, 115  
 Brun, A. 1935, *Publ. Obs. Lyon*, 1, No. 12  
 Parenago, P.P. 1954, *Trudy Sternberg Astron. Inst.*, No. 25

**File Information:** 2 files, 120 Kbytes      **Status:** Has been checked for consistency  
 Documentation in hard copy form only  
 Available via network

**ADC 2053****Hall, R.T.****A Catalogue of 10-Micron Celestial Objects (1974)**

**Keywords:** *infrared photometry; infrared sources*

**Description:** The published report was prepared by R. T. Hall (1974) for the Space and Missile Systems Organization, Air Force System Command. The machine version includes a 10- $\mu$  catalog number, object name, right ascension and declination (B1950.), (B1950.0) galactic coordinates, proper motions, spectral types, magnitudes in the V (0.55 $\mu$ ), I (0.84 $\mu$ ), K (2.2 $\mu$ ) and N (10 $\mu$ ) bands, flux measurements at 10 $\mu$ , and cross identifications to the numbering systems of the *Durchmusterung* catalogs, the *SAO Catalog*, *The Bright Star Catalogue*, *The Henry Draper Catalogue*, the *GC*, and the Cal Tech *Two-Micron Sky Survey* (Neugebauer and Leighton 1969), where such identifications exist.

**References:**

- Hall, R.T. 1974, *Aerospace Corp. Report SAMSO-TR-74-212*  
 Neugebauer, G., and Leighton, R.D. 1969, *Two Micron Sky Survey-A Preliminary Catalog*, NASA SP-3047

**File Information:** 1 file, 236 Kbytes      **Status:** Has been checked for consistency  
 Documentation in hard copy form only  
 Available via network

**ADC 2056****Hoffmann, W.F., Frederick, C.L., and Emery, R.J.****100-Micron Survey of the Galactic Plane (1971)**

**Keywords:** *infrared photometry; surveys; Galactic plane; infrared sources*

**Description:** The catalog represents a survey of a portion of the galactic plane at a wavelength of 100 $\mu$  with a balloon-borne, stabilized, 12-inch infrared telescope having a sensitivity of  $10^{-22}$  W/m<sup>2</sup>/Hz. The survey covers 750 square degrees of the sky, including most of the galactic plane between galactic longitudes of 335° and 88°, plus a number of other selected areas of interest. Seventy-two sources have been detected, 60 of which are identified with continuum radio sources, bright nebulae, dark nebulae, and infrared stars. The catalog includes right ascension and declination (B1950.0), galactic coordinates, 100- $\mu$  peak flux densities, sizes of sources, and identifications.

**Reference:**

Hoffmann, W.F., Frederick, C.L., and Emery, R.J. 1971, *ApJ*, 170, L89

**File Information:** 1 file, 10.3 Kbytes

**Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 2059B**

Thompson, G.I., et al.

**Catalogue of Stellar Ultraviolet Fluxes, A compilation of absolute stellar fluxes measured by the Sky Survey Telescope (S2/68) aboard the ESRO satellite TD-1 (1978)**

**Keywords:** *ultraviolet photometry*

**Description:** The catalog contains results from the sky-scan experiment on the TD1 satellite of the European Space Research Organization. The catalog lists the absolute ultraviolet fluxes in four passbands, centered on 2740 Å, 2365 Å, 1965 Å, and 1565 Å for 31215 stars. The stars have been selected subject to the constraint that the signal-to-noise ratio should be at least 10.0 in any one of the four passbands. The catalog also includes right ascension and declination (B1950.0), V magnitudes, spectral types, and cross identifications to the numbering systems of *The Henry Draper Catalogue* and the *Durchmusterung* catalogs.

**Reference:**

Thompson, G.I., Nandy, K., Jamar, C., Monfils, A., Houziaux, L., Carnochan, D.J., and Wilson, R. 1978, Science Research Council, U.K.

**File Information:** 2 files, 3.19 Mbytes

**Status:** Has been checked for consistency  
Available via network  
Available on CD-ROM  
Full documentation available

**ADC 2067**

Code, A.D., and Meade, M.R.

**OA0 2 Ultraviolet Photometry: An Atlas of Stellar Spectra (1978)**

**Keywords:** *ultraviolet photometry; spectrophotometry*

**Description:** The catalog is a subset comprising the highest quality data obtained with both spectrometers aboard the Orbiting Astronomical Observatory (OA0 2). The first file of the catalog contains ultraviolet stellar fluxes for 164 bright stars in the spectral region 1200-3600 Å with resolutions of 22 Å in the region from 3600 Å to 1850 Å and 12 Å in the region from 1850 Å to 1160 Å. Files 2 and 3 contain spectra for 132 stars in the region 1200-1850 Å and 34 stars in the region 1800-3600 Å, respectively, with resolutions as stated above. The first record of each star is the object identification. The monochromatic flux is given in units of erg/cm<sup>2</sup>/sec/Å for all data. The data have been published in graphical and tabular form in the cited papers.

**References:**

- Code, A.D., and Meade, M.R. 1978, *ApJS*, 39, 195  
 Meade, M.R., and Code, A.D. 1980, *ApJS*, 42, 283

**File Information:** 3 files, 393 Kbytes      **Status:** Has been checked for consistency  
 Documentation in hard copy form only  
 Available via network

**ADC 2068**

Lee, O.J., Baldwin, R.J., and Hamlin, D.W.

**Dearborn Observatory Catalogue of Faint Red Stars (1943)**

**Keywords:** *faint stars; late-type stars*

**Description:** The catalog is the result of a survey of faint red stars conducted at the Dearborn Observatory from about the mid-1930s to about the mid-1940s. The magnitudes in the catalog were obtained through comparison, on red-sensitive emulsion, with the International Polar Sequence. Those magnitudes are fairly reliable to 0.2 mag. The spectral types were obtained from objective-prism plates with red-sensitive emulsion (a separate series of plates from that used to determine magnitudes). The catalog includes the Dearborn numbers, right ascension and declination (B1950), magnitudes, Dearborn spectral types, and *Henry Draper* spectral types. The data were keypunched and verified by the ADC staff.

**References:**

- Lee, O.J., Baldwin, R.J., and Hamlin, D.W. 1943, *Ann. Dearborn Obs.* 5, Part 1A  
 Lee, O.J., and Bartlett, T.J. 1944, *Ann. Dearborn Obs.* 5, Part 1B  
 Lee, O.J., Gore, G.D., and Bartlett, T.J. 1947, *Ann. Dearborn Obs.* 5, Part 1C

**File Information:** 2 files, 1.56 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 2074**

Hauck, B., and Mermilliod, M.

**Photometric Data for the Nearby Stars (1981)**

**Keywords:** *nearby stars*

**Description:** The catalog contains a list of all photometric systems (of those considered) in which each star in the catalog of Gliese (1969) has been measured. The catalog is a subset of a much larger and more comprehensive compilation, currently in preparation at the Institut d'Astronomie, Université de Lausanne, which lists all measured photoelectric photometric systems for any star that has been measured in at least one photometric system. In addition to photometric system identifications the catalog documented here contains cross identifications to *The Henry Draper* and *Durchmusterung* catalogs and apparent visual magnitudes.

**References:**

Hauck, B., and Mermilliod, M. 1981, CDS Bull. No. 21, p. 35

Gliese, W. 1969, Catalogue of Nearby Stars, Veröff. Astron. Rechen-Inst. Heidelb., No. 22

**File Information:** 4 files, 259 Kbytes

**Status:** Has been checked for consistency

Available via network

Available on CD-ROM

Full documentation available

**ADC 2076A**

Goy, G.

**Catalogue General d'Étoiles de Type O. Données Spectroscopiques et  
Photométriques (1980)**

**Keywords:** *O stars; Geneva photometry; H II regions; spectral types*

**Description:** The catalog is a compilation of photographic and photoelectric data in the Geneva system useful for determining the dereddening and the apparent intrinsic magnitudes of O-stars. The data set has four files. The first is the main catalog. It contains identifications, equatorial and galactic coordinates, polarization, H II region, normalized colors (with standard deviation and weight), and spectral types for each of 971 O-stars. The second file contains notes on 385 of the catalog stars. The third file is the same as the second but in the original French. The final file contains data references cited in the second and third files.

**Reference:**

Goy, G. 1980, *A&AS*, 42, 91

**File Information:** 4 files, 437 Kbytes

**Status:** Has been checked for consistency

Documentation in hard copy form only

Available via network

**ADC 2077**

Arens, J., and Rothschild, R.

**Non-Solar X-Ray Measurements (1975)**

**Keywords:** *X-ray sources*

**Description:** The catalog is a compilation of nearly all non-solar X-ray observations in the 0.1-500 KeV range, reported by various observers. The catalog includes observer's institution, position in equatorial and galactic coordinates, source names, energy ranges of observations in KeV, energy resolution in KeV, temporal resolution, dates of observations, lengths of observations, types of detectors, vehicles carrying the payload, references, comments of contributors, and background-type sources. As this catalog was published in September 1975, it is probably complete through 1974.

**Reference:**

Arens, J., and Rothschild, R. 1975, *NASA/GSFC Doc. X-661-75-230*

**File Information:** 1 file, 711 Kbytes      **Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 2080**

McClure, R.D., and Forrester, W.T.

**A Catalogue of Homogeneous Photometry of Bright Stars on the DDO System  
(1981)**

**Keywords:** *DDO photometry; bright stars*

**Description:** The catalog is a compilation of DDO photometry of 2196 bright G and K stars prepared from observations made at Kitt Peak National and Cerro Tololo Inter-American Observatories in the few years before 1981, using filter sets well matched to the standard system. The catalog includes a large number of DDO stars whose data have been taken directly from the standard-star paper of McClure (1976), plus a representative sample of stars selected from *The Bright Star Catalogue* (Hoffleit 1964) and the *Catalogue of High Velocity Stars* (Eggen 1964) to have good velocities, spectral types, and freedom from companion contamination. The catalog contains *HD* catalogue numbers; *DM* identifications; and the standard photometric indices of the DDO system: magnitude at 4800 Å and the color indices *c*(45-48), *c*(42-45), *c*(41-42), *c*(38-41), and *c*(35-38). The number of observations from which each index was determined is also given, along with standard errors.

**References:**

- McClure, R.D., and Forrester, W.T. 1981, *Publ. Dominion Astrophys. Obs.* 15, 439  
 Eggen, O.J. 1964-1965, *Catalogue of High Velocity Stars*, Royal Obs. Bull. No. 84  
 Hoffleit, D. 1964, *The Bright Star Catalogue*, 3rd Revised Edition (New Haven: Yale University Observatory)  
 McClure, R.D. 1976, *AJ*, 81, 182

**File Information:** 2 files, 202 Kbytes      **Status:** Has been checked for consistency  
Available in microfiche version  
Available via network  
Full documentation available

**ADC 2082**

Garmany, C.D., Conti, P.S., and Chiosi, C.

**Catalog of Galactic O-Type Stars (1982)**

**Keywords:** *O stars*

**Description:** The catalog is a compilation from the literature of all O-type stars for which spectral types, luminosity classes, and UVB photometry exist. The catalog contains 765 stars, for each of which designation (*HD*, *DM*, etc.), spectral type, *V*, *B-V*, absolute visual magnitude, absolute bolometric magnitude, cluster membership, distance, galactic coordinates, and source references are given. In addition, the authors have included derived values of absolute visual and bolometric magnitudes, and distances.

**References:**

Garmany, C.D., Conti, P.S., and Chiosi, C. 1982, *ApJ*, 263, 777

Garmany, C.D. 1983, *ADC Bull.* 1, 172

**File Information:** 2 files, 122 Kbytes      **Status:** Has been checked for consistency  
 Available via network  
 Full documentation available

**ADC 2083**

Code, A.D., Holm, A.V., and Bottemiller, R.L.

**OAD 2 Ultraviolet Filter Photometry for 531 Stars (1980)**

**Keywords:** *ultraviolet photometry*

**Description:** The catalog contains the ultraviolet photometry of 531 stars observed with the Wisconsin Experiment Package aboard the Orbiting Astronomical Observatory (OAD 2). The data were obtained with medium-band interference filters and have been reduced to a uniform magnitude system. The ultraviolet magnitudes contained in the catalog have been published by Code et al. (1980). While the published tables contain 11 tabulated magnitudes, the machine version includes a twelfth filter (S2F2 at 2945 Å). The catalog includes cross identifications to the numbering systems of *The Bright Star Catalogue*, *The Henry Draper Catalogue*, and the *GC*, star name, spectral type, V magnitude, B-V, U-B, references, remarks, and 12 ultraviolet magnitudes. The effective wavelengths (for a flat spectrum source) are 4250 Å, 3320 Å, 2980 Å, 2965 Å, 2460 Å, 2380 Å, 2035 Å, 1910 Å, 1680 Å, 1550 Å, 1430 Å, and 1330 Å. For most filters, the full width, half maximum is about 30% of the central wavelength.

**Reference:**

Code, A.D., Holm, A.V., and Bottemiller, R.L. 1980, *ApJS*, 43, 501

**File Information:** 1 file, 68.4 Kbytes      **Status:** Has been checked for consistency  
 Documentation in hard copy form only  
 Available via network

**ADC 2084**

Johnson, H.L., and Mitchell, R.I.

**13-Color Photometry of 1380 Bright Stars (1975)**

**Keywords:** *13-color photometry; bright stars*

**Description:** The catalog contains 13-color photometry of all stars brighter than fifth visual magnitude north of declination  $-20^\circ$  and essentially all stars brighter than fourth visual magnitude south of declination  $-20^\circ$ . Stars are identified by HR number from *The Bright Stars Catalogue* (Hoffleit 1964), and MK spectral types are given. The filters of the 13-color system are identified by numbers indicating their approximate effective wavelengths, i.e., 33, 35, 37, 40, 45, 52, 58, 63, 72, 80, 86, 99, and 110. Thus, the 33 filter has an effective wavelength of approximately 3300 Å, etc.

**References:**

- Johnson, H.L., and Mitchell, R.I. 1975, *Rev. Mex. Astron. Astrof.* 1, 2  
 Hoffleit, D. 1964, *The Bright Star Catalogue*, 3rd Revised Edition (New Haven: Yale University Observatory)

**File Information:** 2 files, 204 Kbytes      **Status:** Has been checked for consistency  
 Available in microfiche version  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 2085**

Johnson, H.L.

**Absolute Calibration of Stellar Spectrophotometry (1980)**

**Keywords:** *spectrophotometry*

**Description:** The catalog contains the absolute fluxes for 16 stars published in Tables 1 and 2 of Johnson (1980). The absolute calibrations were accomplished by combining the 13-color photometry calibrations of Johnson and Mitchell (1975) with spectra obtained with a Michelson spectrophotometer and covering the wavelength range 4000 Å to 10300 Å (Johnson 1977). The agreement between the absolute calibration and another recent one based upon data for  $\alpha$  Lyr and 109 Vir by Tug et al. (1977) is shown (Johnson 1980) to be quite good. The catalog includes star names, cross identifications to the numbering systems of *The Bright Star Catalogue* and the *Henry Draper Catalogue* and arrays of fluxes having the same number of elements for each of the 16 stars.

**References:**

- Johnson, H.L. 1980, *Rev. Mex. Astron. Astrofis.* 5, 25  
 Johnson, H.L. 1977, *Rev. Mex. Astron. Astrofis.* 2, 219  
 Johnson, H.L., and Mitchell, R.I. 1975, *Rev. Mex. Astron. Astrofis.*, 1, 29  
 Tug, H., White, N.M., and Lockwood, G.W. 1977, *A&A*, 61, 79

**File Information:** 2 files, 41.6 Kbytes      **Status:** Has been checked for consistency  
 Available via network  
 Full documentation available

**ADC 2086**

Macau-Hercot, D., et al.

**Supplement to the Ultraviolet Bright Star Spectrophotometric Catalogue (1978)**

**Keywords:** *spectrophotometry; ultraviolet photometry*

**Description:** This data set (ESA SR-28) is a supplement to the ADC 2059B (ESA SR-27). The data set contains data from the second (19 February to 30 September 1973) and third (16 February to 6 May 1974) observation periods of the Sky Survey Telescope (S2/68) on the European Astronomical Satellite TD-1. The data reduction and selection criteria applied are the same as with the first period data. Although most of the stars observed during the first period were again seen in the second and

third period, only stars not seen in the first period are included here. This data set adds 435 new data records.

**Reference:**

Macau-Hercot, D., Jamar, C., Monfls, A., Thompson, L., Houziaux, L., and Wilson, R. 1978, ESA SR-28

**File Information:** 2 files, 918 Kbytes      **Status:** Has been checked for consistency  
Available via network  
Available on CD-ROM

**ADC 2090**

Olsen, E.H.

Four-Colour uvby and H-beta Photometry of A5 to G0 Stars Brighter than 8.3 mag (1983)

**Keywords:** *uvby photometry, beta*

**Description:** The catalog resulted from a photometric survey of *HD* stars of types A5 to G0 brighter than  $m_v = 8.3$ . The author compiled the data set to provide a complete, magnitude limited, kinematically unbiased sample of late F-type stars belonging to the intermediate population II. The machine-readable version consists of ten files. The first file contains the main catalog data, compiled from eight smaller catalogs (one from each part of the observing program). Files 2 through 8 contain lists of uvby standard stars transformed to the Crawford-Barnes system (Crawford and Barnes 1970). Files 9 and 10 contain beta standard stars transformed to the Crawford-Mander system (Crawford and Mander 1966). The main catalog file lists for each of 14816 stars its identification, V magnitude and error, uvby indices and errors in the Crawford-Barnes standard system, beta and error in the Crawford-Mander standard system, weightings, number of observations, and difference between standard and transformed values for the standard stars used in reducing the observational data.

**References:**

Olsen, E.H. 1983, *A&AS*, 54, 55  
Crawford, D.L., and Barnes, J.V. 1970, *AJ*, 75, 978  
Crawford, D.L., and Mander, J. 1966, *AJ*, 71, 114

**File Information:** 10 files, 1.38 Mbytes      **Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 2091**

Carnochan, D.J.

Catalogue of Intrinsic Colours of Stars in the Ultraviolet (1982)

**Keywords:** *ultraviolet photometry; colors*

**Description:** The catalog contains intrinsic ultraviolet colors for normal stars between O6.5V and K3III. These have been derived from the absolute ultraviolet fluxes obtained by the S2/68 Ultraviolet

Sky Survey Telescope aboard the ESRO TD1 satellite, corrected to the standard calibration of Bohlin et al. (1981) for the star  $\eta$  UMa. The catalog contains 671 records, one for each MK spectral type and luminosity class between O6.5Ia and K3V. Each record consists of 25 broad- and narrow-band colors in the form  $(m_\lambda - V)_0$ , covering the wavelength range 1400 Å to 2740 Å. Complementary data including  $(B-V)_0$ ,  $(U-B)_0$ , and absolute visual magnitude,  $M_v$ , are also given for each type.

**References:**

Carnochan, D.J. 1982, CDS Bull. No. 22, p. 75

Carnochan, D.J. 1982, MNRAS, 201, 1139

Bohlin, R.C., Holm, A.V., Savage, D.B., Snijders, M.A.J., and Sparks, W.M. 1981, A&A, 85, 1

**File Information:** 2 files, 228 Kbytes      **Status:** Has been checked for consistency  
 Available via network  
 Description for machine version

**ADC 2092**

Page, T.L., Carruthers, G.R., and Heckathorn, H.M.

**Revised S201 Catalog of Far-Ultraviolet Objects (1982)**

**Keywords:** *ultraviolet photometry*

**Description:** The catalog was compiled from images obtained by the NRL Far-Ultraviolet camera/spectrograph operated from the lunar surface from 21-23 April 1972 during the Apollo 16 mission. The catalog was prepared by scanning the images on a microdensitometer and recording its output on tape. The *Revised S201 Catalog* differs from the first edition (Page, Carruthers, and Hill 1978) in that the brightnesses of all detected objects have been transformed to an absolute scale of UV magnitudes based on instrumental preflight calibrations. Positional errors of the detected images are less than or of order 3'. Reference 1 should be consulted for more detailed information concerning the instrumentation used, data reduction and analysis, and comparison with stellar models and with other UV catalogs. The machine catalog contains data for 11 fields; individual data records include information such as running number of the object in the field, exposure time for the image, filter used, scan coordinates, equatorial position, object identification, differences between measured and catalog coordinates, spectral type, SAO or other visual and photographic magnitudes, peak density, pixel, background and scan information, and ultraviolet magnitude.

**References:**

Page, T.L., Carruthers, G.R., and Heckathorn, H.M. 1982, U.S. Naval Research Laboratory Report 8487

Page, T., Carruthers, G.R., and Hill, R. 1978, S201 Catalog of Far-Ultraviolet Objects, NRL Report 8173 (Washington: Naval Research Laboratory)

**File Information:** 2 files, 798 Kbytes      **Status:** Has been checked for consistency  
 Available in microfiche version  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 2094**

Price, S.D., and Murdock, T.L.

**The Revised AFGL Infrared Sky Survey Catalog and Supplement (1983)****Keywords:** *infrared photometry; surveys; infrared sources*

**Description:** The catalog (*RAFGL*) contains the results of extensive verification and photometric studies of *AFGL* sources performed since the publication of *The AFGL Four Color Infrared Sky Survey: Catalog of Observations at 4.2, 11.0, 19.8, and 27.4 $\mu$*  (AFGL, Price and Walker 1976) as well as recent survey measurements with larger instruments. Improved positions and more extensive photometry have been provided by ground-based searches for the *RAFGL* objects and questions about unconfirmed sources from early investigations of the *AFCRL Infrared Sky Survey* (Walker and Price 1975) have, for the most part, been resolved. Many of the spurious sources were eliminated from the *AFGL* catalog in the reanalysis by including a rescan confirmation criterion in addition to the signal-to-noise gate used for the *AFCRL* catalog. The *RAFGL* is a revision of *AFGL* to include more accurate information and to provide identifications and improved positions for unidentified *AFGL* sources. The catalog includes right ascension and errors, spectral types, *AFGL* numbers, identifications of the sources in the *TMSS* (Neugebauer and Leighton 1969) and in *The Bright Star Catalogue*, plus other designations for the sources, such as Bayer designations and Flamsteed numbers, if they exist.

**References:**

- Price, S.D., and Murdock, T.L. 1983, Air Force Geophysics Laboratory, AFGL-TR-83-0161
- Neugebauer, G., and Leighton, R.D. 1969, Two Micron Sky Survey - A Preliminary Catalog, NASA SP-3047
- Price, S.D., and Walker, R.G. 1976, The AFGL Four-Color Infrared Sky Survey: Catalog of Observations at 4.2, 11.0, 19.8, and 27.4 $\mu$  (AFGL), AFGL-TR-76-0208 (Hanscom AFB, MA, Air Force Geophysics Laboratory, Air Force Systems Command, USAF)
- Walker, R.G., and Price, S.D. 1975, The AFCRL Infrared Sky Survey Vol. I: Catalog of Observations at 4, 11, and 20 $\mu$  (AFCRL), AFCRL-TR-75-0373, AD A016397, Air Force Cambridge Research Laboratories

**File Information:** 3 files, 857 Kbytes

**Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 2096**

Sweeney, L.H., et al.

**Interim Equatorial Infrared Catalogue (1978)****Keywords:** *infrared photometry; equatorial stars*

**Description:** The catalog was prepared as a result of additional processing of USAF satellite data at 2.7 $\mu$  for sources within 10° of the celestial equator. Every source has been observed on two or more

days or on the same day at times 20 min apart. The catalog includes right ascension and declination (equinox B1950.0), flux densities and their standard deviations, galactic coordinates, spectral types, and cross identifications to the numbering systems of *EIC-1*, the *SAO* and *AFGL* catalogs, and the *Durchmusterung* catalogs.

**Reference:**

Sweeney, L.H., Heinsheimer, T.F., Yates, F.F., Maran, S.P., Lesh, J.R., and Nagy, T.A. 1978, Aerospace Report TR-0078(3409-20)-1

**File Information:** 1 file, 143 Kbytes      **Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 2097**

Wesselius, P.R., et al.

**ANS Ultraviolet Photometry Catalogue of Point Sources (1982)**

**Keywords:** *ultraviolet photometry*

**Description:** This catalog is a compilation of UV photoelectric measurements at 15, 18, 22, 25, and 33 nm for 3573 objects (mostly stars). These observations were made with the Astronomical Netherlands Satellite (ANS) between October 1974 and April 1976. The reported magnitudes were obtained from mean count rates converted to fluxes using the ANS absolute calibration of Wesselius et al. (1980). In addition to the ultraviolet magnitudes, the catalog contains positions taken from the satellite pointing, spectral types, and UBV data from other sources as well as comments on duplicity, variability, and miscellaneous notes concerning individual objects.

**References:**

Wesselius, P.R., van Duinen, R.J., de Jonge, A.R.W., Aalders, J.W.G., Luinge, W., and Wildeman, K.J. 1982, *A&AS*, 49, 427

Wesselius, P.R., van Duinan, R.J., Aalders, J.W.G., and Kester, D. 1980, *A&A*, 85, 221

**File Information:** 2 files, 509 Kbytes      **Status:** Has been checked for consistency  
Available via network  
Available on CD-ROM  
Full documentation available

**ADC 2104**

Mermilliod, J.C.

**Photographic UBV Photometry for Stars in Open Clusters (1984)**

**Keywords:** *UBV photometry; open clusters*

**Description:** This catalog is a compilation of previously published UBV photographic photometry of over 34000 stars in 127 open clusters. The author has adopted a uniform numbering system (as used in some other catalogs) and translated the identifications of all stars to this system. References to the photometric data and the individual numbering systems are also included. The catalog is in

three files: The first file lists the catalog data, the second lists the full forms of the references cited by code number in the first, and the third contains a list of references to the numbering schemes for each cluster.

**Reference:**

Mermilliod, J.C. 1984, *CDS Bull. No. 27*, p. 141

**File Information:** 3 files, 1.34 Mbytes      **Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 2106**

Noguchi, T., Maehara, H., and Kondo, M.

**A Search for Ultraviolet-Excess Objects (1980)****Keywords:** *ultraviolet photometry*

**Description:** The catalog is a list of 1186 ultraviolet-excess objects found during two surveys with the Kiso Schmidt telescope of the Tokyo Astronomical Observatory. The UGR three-image method was used to detect the objects cataloged, which range in blue magnitude from about 10.0 to 18.5. The table contains equatorial positions to an accuracy of about 0.5" (equinox and equator B1950.0, epoch of observation), magnitudes (green of the "three-image [UGR] method"), color indices (as estimated from the enhancement of the U image relative to the G), object codes (white dwarf, QSO, diffuse object, etc.), and alternate designations (in addition to a KUV coordinate designation).

**References:**

Noguchi, T., Maehara, H., and Kondo, M. 1980, *Ann. Tokyo Astron. Obs., 2nd series*, 18, 55

Kondo, M., Noguchi, T., and Maehara, H. 1984, *Ann. Tokyo Atron. Obs., 2nd series*, 20, 130

**File Information:** 1 file, 92.7 Kbytes      **Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 2108**

Nagy, T.A., Hill, R.S., and Mead, J.M.

**The Two-Micron Sky Survey: Nearest SAO Star and Locations on Palomar Sky Survey Prints (1983)****Keywords:** *surveys*

**Description:** This catalog is a list of potential guide stars developed for a program to obtain more precise positions of objects in the *IRC Two-Micron Sky Survey* of Neguebauer and Leighton (1969). For each *IRC* source (col. 1), it gives: (col. 2) the identification of the star in the *SAO* catalog which is nearest, (col. 3) the great circle arc distance (in seconds) between the *SAO* star and the *IRC* source, (col. 4) the position angle (in degrees) of the *IRC* source relative to the *SAO* star, (col. 5) the plate

number(s) of the POSS on which the *IRC* source appears, (col. 6,7) the approximate rectangular coordinates (in mm) of the *IRC* source on the POSS print area with respect to the Southwest corner, and (col. 8) the modified Luyten Palomar number. The POSS plate numbers given are for the red plates.

**References:**

- Nagy, T.A., Hill, R.S., and Mead, J.M. 1983, *ADC Bull.* 1, 183  
 Haramundus, K.L. 1966, Smithsonian Astrophysical Observatory Star Catalog (SAO), Smithsonian Institution, Washington, D.C., Smithsonian Publication 4652  
 Neugebauer, G., and Leighton, R.B. 1969, Two-Micron Sky Survey, NASA SP-3047

**File Information:** 1 file, 326 Kbytes      **Status:** Has been checked for consistency  
 Documentation in hard copy form only  
 Available via network

**ADC 2114**

Savage, B.D., et al.

**A Catalog of Ultraviolet Interstellar Extinction Excesses for 1415 Stars (1985)**

**Keywords:** *interstellar medium*

**Description:** This catalog contains interstellar extinction excesses in the ultraviolet region, as derived from five-channel Astronomical Netherlands Satellite (ANS) UV photometry. The rectangular bandpasses had central wavelengths of 1549 Å, 1799 Å, 2200 Å, 2493 Å, and 3294 Å with widths of 149 Å, 149 Å, 200 Å, 150 Å, and 101 Å, respectively. Color excesses were derived for each UV wavelength with reference to the V filter of the UBV system as well as a measure of excess extinction in the 2200 Å bump. The photometric data used were taken from the *ANS Ultraviolet Photometry Catalogue of Point Sources* (Wesselius et al. 1982), and excesses were derived for 1415 stars with spectral types of B7 and earlier. Data in the catalog include object identification in a uniform format; right ascension and declination (1950); galactic coordinates estimated distance based on MK type; V magnitude and spectral type taken from the ANS catalog; color excesses  $E_{H-V}$ ,  $E_{33-V}$ ,  $E_{25-V}$ ,  $E_{22-V}$ ,  $E_{18-V}$ ,  $E_{15-V}$ ; extinction parameter  $E_{Bump}$ ; Delta parameters for the bump and (15-V) (measuring the deviation of the extinction curve affecting a given star from the sample mean curve, normalized by the rms scatter of the entire sample), and comments codes for variability, cluster proximity, and duplicity. The UV extinction measures are appended by uncertainty flags where appropriate.

**References:**

- Savage, B.D., Massa, D., Meade, M.R., and Wesselius, P.R. 1985, *ApJS*, 59, 397  
 Wesselius, P.R., van Duinen, R.J., de Jonge, A.R.W., Aalders, J.W.G., Luinge, W., and Wildeman, K.J. 1982, *ANS Ultraviolet Photometry, Catalogue of Point Sources*, *A&AS*, 49, 427

**File Information:** 1 file, 182 Kbytes      **Status:** Has been checked for consistency  
 Documentation in hard copy form only  
 Available via network

**ADC 2116**

Lanz, T.

**Photoelectric Photometric Catalogue in the Johnson UBVRI System (1986)****Keywords:** *UBVRI photometry*

**Description:** The catalog is a compilation of photoelectric photometry in the Johnson UBVRI system published prior to mid-1984. The catalog contains a total of 6849 stars in the original Johnson system (Morel and Magnenat 1978), 467 stars in the system of Kunkel and Rydgren (1979), 1150 stars in the system of Moffett and Barnes III (1979), and 252 stars in the system of Neckel and Chini (1980). The catalog is in 14 files: The first 12 files list observational data, mean values, and references for each of the four standard systems. An additional two files contain the numbering scheme of Mermilliod (1978) used to identify objects, and introductory information.

**References:**

- Lanz, T. 1986, *A&AS*, 65, 195  
 Kunkel, W.E., and Rydgren, A.E. 1979, *AJ*, 84, 633  
 Mermilliod, J.C. 1978, *Bull. Inform. CDS No. 14*, p. 32  
 Moffett, T.J., and Barnes III, T.G. 1979, *PASP*, 91, 180  
 Morel, M., and Magnenat, P. 1978, *A&AS*, 34, 477  
 Neckel, T., and Chini, R. 1980, *A&AS*, 39, 411

**File Information:** 17 files, 2.29 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 2118**

Landolt, A.U.

**UBVRI Photometric Standard Stars Around the Celestial Equator (1983)****Keywords:** *UBVRI photometry; standard stars; equatorial stars*

**Description:** The catalog contains UBVRI photoelectric observations of 223 stars, mostly in an approximately  $2\text{-}^{\text{circ}}$  zone centered on the celestial equator. The catalog is intended to provide a uniform set of new standards, available to various sizes of telescopes in both hemispheres, on an internally consistent, homogeneous system. Most of the stars are in Selected Areas 92-115 and fall in the magnitude range of about 7 to 12.5 in V and color range  $-0.3$  to  $+2.0$  in B-V. The data include equatorial coordinates, photoelectric magnitudes and colors, numbers of observations, and computed internal errors.

**Reference:**

- Landolt, A.U. 1983, *AJ*, 88, 439

**File Information:** 5 files, 112 Kbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 2122A**

Mermilliod, J.C.

**UBV Photoelectric Photometry Catalogue (1986)**

**Keywords:** *UBV photometry*

**Description:** This catalog is a compilation of stellar photoelectric photometry on the Johnson-Morgan UBV and closely related (e.g., Cape UcbV) systems published from 1953 through the end of 1985. It supersedes earlier versions of the compilation (Mermilliod and Nicolet 1977, Mermilliod 1980). Although it is a compilation of individual measurements, known variable stars are not included except for certain small-amplitude objects; that is, this catalog is meant to be one of all UBV photoelectric photometry for constant stars. The catalog contains a total of 136719 measurements of 87267 stars. Separate files contain the observations on the Johnson-Morgan system and several closely related systems; then a third file presents the combined data. Other files give bibliographical references, stars for which the observations of different investigators appear to be discrepant (There are 933 such stars.), and a description of the Geneva coded numbering system used to identify the objects.

**References:**

**Mermilliod, J.C. 1986**

Mermilliod, J.C. 1980, Bull. Inform. CDS No. 19, p. 63

Mermilliod, J.C., and Nicolet, B. 1977, A&AS, 29, 259

**File Information:** 10 files, 13.9 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 2124A**

Mermilliod, J.C.

**Catalogue of UBV Photometry and MK Spectral Types in Open Clusters (1986)**

**Keywords:** *open clusters; MK spectral classification; UBV photometry*

**Description:** The catalog is a compilation of photoelectric UBV photometry and MK spectral types published up to 1986 for 16433 stars in 295 open clusters. It updates the 1976 edition and contains nearly twice as many data as the earlier version. The catalog lists identifications, cross-identifications, V, B-V, U-B, spectral types, remarks on various peculiarities, and references.

**Reference:**

**Mermilliod, J.C. 1986, CDS Bull. No. 31, p. 175**

**File Information:** 8 files, 3.38 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 2125**

IPAC

**IRAS Catalog of Point Sources, Version 2.0 (1986 October)**

**Keywords:** *infrared photometry; infrared sources; surveys*

**Description:** This is a catalog of some 250000 well-confirmed infrared point sources observed by the Infrared Astronomical Satellite, i.e., sources with angular extents less than approximately 0.5, 0.5, 1.0, and 2.0 arcmin in the in-scan direction at 12, 25, 60, and 100  $\mu$ , respectively. Positions, flux densities, uncertainties, associations with known astronomical objects and various cautionary flags are given for each object. While two other complementary data sets - the *Working Survey Data Base* and a file of rejected sources - give information about point-like sources, the information available in the *Point Source Catalog* should satisfy almost all users. Away from confused regions of the sky, the survey is complete to about 0.4, 0.5, 0.6, and 1.0 Jy at 12, 25, 60, and 100  $\mu$ . Typical position uncertainties are about 2" to 6" in-scan and about 8" to 16" cross-scan. The processing steps applied to detect and confirm point sources, and the positional and photometric error analyses are described in the *IRAS Catalogs and Atlases Explanatory Supplement*; the catalog format is described in Chapter X. The sources appear in order of increasing (1950.0) right ascension.

**References:****IPAC 1986 October**

IRAS Catalogs and Atlases Explanatory Supplement, 1988, ed. Beichman C., Neugebauer G., Habing H.J., Clegg P.E., and Chester T.J. (Washington, D.C.: GPO), NASA RP-1190, Vol. 1

**File Information:** 3 files, 45.5 Mbytes      **Status:** Has been checked for consistency  
 Available in microfiche version  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 2126**

IPAC

**IRAS Serendipitous Survey Catalog (1986 December)**

**Keywords:** *infrared photometry; surveys; infrared sources*

**Description:** This is a catalog of 12, 25, 60, and 100  $\mu$  photometric observations of 43866 point-like sources detected fortuitously in the Infrared Astronomical Satellite Pointed Observation program. The main objective was to take advantage of the longer-than-nominal integration time per source to extend the detection threshold relative to that of the *Point Source Catalog (PSC)*; about three-fourths of the *Serendipitous Survey Catalog (SSC)* sources do not appear in the *PSC*. From 1813

Pointed Observation fields, the effective sky coverage is 1108 square degrees. Relative to the *PSC*, the *SSC* is characterized by enhanced sensitivity (by a factor of about 4) in all four wavelength bands, excellent reliability in uncrowded fields, uneven sky coverage and completeness, reduced positional accuracy, improved photometric accuracy, and much greater depth in crowded fields at the expense of reliability and accuracy. The *SSC* data processing, the catalog format, and an analysis are given in the *Explanatory Supplement to the IRAS Serendipitous Survey Catalog*.

#### References:

##### IPAC 1986 December

Kleinmann, S.G., Cutri, R.M., Young, E.T., Low, F.J., and Gillett, F.C. 1986, Explanatory Supplement to the IRAS Serendipitous Survey Catalog (Pasadena: JPL)

IRAS Catalogs and Atlases Explanatory Supplement, 1988, ed. Beichman C., Neugebauer G., Habing H.J., Clegg P.E., and Chester T.J. (Washington, D.C.: GPO), NASA RP-1190, vol 1

Young E.T., Neugebauer, G., Kopan, E.L., Benson, R.D., Conrow, T.P., Rice, W.L., and Gregorich, D.T. 1985, A User's Guide to IRAS Pointed Observation Products, IPAC Preprint PRE-008N

**File Information:** 5 files, 9.57 Mbytes      **Status:** Has been checked for consistency  
 Available in microfiche version  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 2136**

Gezari, D.Y., Schmitz, M., and Mead, J.M.

### Catalog of Infrared Observations (1987)

**Keywords:** *infrared sources*

**Description:** The catalog and its associated data base comprise a summary of infrared astronomical observations published in the scientific literature from 1965 through 1986 in the wavelength range 1-1000  $\mu$ . The data base contains infrared observational data for sources outside the solar system, constructed through a search of the most active scientific journals, IR surveys, and catalogs. To date, fewer than 2900 journal articles and ten major survey catalogs have been included in the data base, which contains fewer than 140000 individual observations of about 11500 different infrared sources. More than 8000 of these sources are identifiable with visible objects. The bibliographical files link observations in the catalog with the original articles published in the literature and contain references listed both chronologically by reference number and alphabetically by first author. References give the standard information plus full titles. The Index of Infrared Source Positions is ordered alphabetically by source name and can be used to quickly locate sources in the position-ordered catalog. Nominal positions are usually the best available but not necessarily the true IR positions. Nominal position references are indicated in the index. The printed version of the catalog lists all IR catalogs included in the data base and the scientific journals searched.

#### Reference:

Gezari, D.Y., Schmitz, M., and Mead, J.M. 1987, NASA Ref. Pub. 1196

**File Information:** 7 files, 21.5 Mbytes      **Status:** Has been checked for consistency  
Available via network  
Available on CD-ROM

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**ADC 2139****Kholopov, P.N., et al.****General Catalogue of Variable Stars, 4th Edition, Vol III (1985-1988)****Keywords:** *variable stars*

**Description:** This data set is the machine-readable version of the fourth edition of the *General Catalogue of Variable Stars* (Kholopov et al. 1985-1988). The machine version contains the same data as in the first three volumes of the printed catalog, but only the data tables without the textual material (introduction, bibliography, remarks) are included. Modifications to the format of the machine version have been made at the Astronomical Data Center in order to effect a completely homogeneous record structure suitable for full machine processing and sorting. The fourth edition of the *General Catalogue of Variable Stars* supersedes the third edition (Kukarkin et al. 1969-1970), three supplements (Kukarkin et al. 1971, 1974, 1976) containing data for 5401 new variable stars and improved data for many earlier designated variables, and five name lists (62-66) published in the *Information Bulletin of Variable Stars* (Kukarkin et al. 1976; Kholopov et al. 1978, 1979, 1981a, 1981b), which included only cross identifications for 2619 new variables. This new edition contains data for 28484 individual objects discovered and named by 1982 and located mainly in the Milky Way Galaxy. These data are contained in the first three published volumes. The fourth volume of the fourth edition, published in 1990, contains a table of all variables ordered by right ascension and declination (B1950), a table of variables listed by variability type, and an extensive series of cross-identification tables to alternate designations (see ADC 2172). The fifth and final volume will contain data for all presently known variables in external galaxies (including the Magellanic Clouds), extragalactic supernovae, and optically variable quasistellar objects and galactic nuclei. Data contained in the catalog include star identifier, equatorial position (B1950), annual precession, galactic coordinates, type of variability, maximum and minimum magnitudes, epoch of maximum, period, and spectral type. The references and notes on individual variables are not contained in the machine version; therefore, the published catalog must be consulted for this information. Since extensive modifications have been made to the record structure of the machine version, users are encouraged to carefully study the brief descriptions given in the document.

**References:**

- Kholopov, P.N., Samus', N.N., Frolov, M.S., Goranskij, V.P., Gorynya, N.A., Kireeva, N.N., Kukarkina, N.P., Kurochkin, N.E., Medvedeva, G.I., Perova, N.B., and Shugarov, S. Yu. 1985-1988, Moscow: Nauka Publishing House
- Kholopov, P.N., Kukarkina, N.P., and Perova, N.B. 1978, 63rd Name-List of Variable Stars, Inf. Bull. Variable Stars, No. 1414
- Kholopov, P.N., Kukarkina, N.P., and Perova, N.B. 1979, 64th Name-List of Variable Stars, Inf. Bull. Variable Stars, No. 1581
- Kholopov, P.N., Samus', N.N., Frolov, M.S., Goranskij, V.P., Gorynya, N.A., Kireeva, N.N., Kukarkina, N.P., Kurochkin, N.E., Medvedeva, G.I., Perova, N.B., and Shugarov, S.Yu. 1985-1988, General Catalogue of Variable Stars, 4th edition ( Moscow: Nauka Publishing House)

- Kholopov, P.N., Samus', N.N., Kukarkina, N.P., Medvedeva, G.I., and Perova, N.B. 1981a, 65th Name-List of Variable Stars, *Inf. Bull. Variable Stars*, No. 1 921
- Kholopov, P.N., Samus', N.N., Kukarkina, N.P., Medvedeva, G.I., and Perova, N.B. 1981b, 66th Name-List of Variable Stars, *Inf. Bull. Variable Stars*, No. 2042
- Kukarkin, B.V., Kholopov, P.N., Efremov, Yu.P., Kukarkina, N.P., Kurochkin, N.E., Medvedeva, G.I., Perova, N.B., Pskovsky, Yu.P., Fedorovich, V.P., and Frolov, M.S. 1971, First Supplement to the Third Edition of the General Catalogue of Variable Stars (Moscow: Publishing House of the Academy of Sciences of the U.S.S.R.)
- Kukarkin, B.V., Kholopov, P.N., Efremov, Yu.P., Kukarkina, N.P., Kurochkin, N.E., Medvedeva, G.I., Perova, N.B., Pskovsky, Yu.P., Fedorovich, V.P., and Frolov, M.S. 1974, Second Supplement to the Third Edition of the General Catalogue of Variable Stars (Moscow, Publishing House of the Academy of Sciences of the U.S.S.R.)
- Kukarkin, B.V., Kholopov, P.N., Fedorovich, V.P., Kireyeva, N.N., Kukarkina, N.P., Medvedeva, G.I., and Perova, N.B. 1976, 62nd Name-List of Variable Stars, *Inf. Bull. Variable Stars*, No. 1248
- Kukarkin, B.V., Kholopov, P.N., Kukarkina, N.P., Kurochkin, N.E., Medvedeva, G.I., Perova, N.B., Pskovsky, Yu.P., Fedorovich, V.P., and Frolov, M.S. 1976, Third Supplement to the Third Edition of the General Catalogue of Variable Stars (Moscow: Publishing House of the Academy of Sciences of the U.S.S.R.)
- Kukarkin, B.V., Kholopov, P.N., Pskovsky, Yu.P., Efremov, Yu.N., Kukarkina, N.P., Kurochkin, N.E., Medvedeva, G.I., Perova, N.B., Fedorovich, V.P., and Frolov, M.S. 1969-1970, General Catalogue of Variable Stars, 3rd edition (Moscow: Publishing House of the Academy of Sciences of the U.S.S.R.)

**File Information:** 4 files, 4.67 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Full documentation available

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**ADC 2140**

**Kukarkin, B.V., et al.**

### New Catalogue of Suspected Variable Stars (1982)

**Keywords:** *variable stars*

**Description:** The catalog is a compilation of 14812 stars suspected of exhibiting variability and not finally designated as variables prior to 1980. It is the successor to the *Catalogues of Stars Suspected of Variability* (Kukarkin et al. 1951 and Kukarkin et al. 1965). The machine-readable version contains positions (epoch 1950.0), maximum and minimum magnitudes, variability types, spectral type, alternate star designations, and references to the literature. The catalog consists of three files: an introduction, the catalog data, and a cross index of star identifications.

**References:**

- Kukarkin, B.V., Kholopov, P.N., Artiukhina, N.M., Fedorovich, V.P., Frolov, M.S., Goranskij, V.P., Gorynya, N.A., Karitskaya, E.A., Kireeva, N.N., Kukarkina, N.P., Kurochkin, N.E., Medvedeva, G.I., Perova, N.B., Ponomareva, G.A., Samus', N.N., and Shugarov, S. Yu. 1982, Moscow: Nauka Publishing House
- Kukarkin, B.V., Kholopov, P.N., Efremov, Yu.N., and Kurochkin, N.E. 1965, Second Catalogue of Stars Suspected of Variability (Moscow: Publishing House of the Academy of Sciences of the U.S.S.R.)
- Kukarkin, B.V., Parenago, P.P., Efremov, Yu.N., and Kholopov, P.N. 1951, Second Catalogue of Stars Suspected of Variability (Moscow: Publishing House of the Academy of Sciences of the U.S.S.R.)

**File Information:** 6 files, 3.63 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 2143**

Lasker, B.M., et al.

**The Hubble Space Telescope Guide Star Photometric Catalog (1988)**

**Keywords:** *photometry, sequences; UBV photometry; bibliography*

**Description:** The catalog contains an all-sky set of 1477 photoelectrically determined BV sequences covering the magnitude range from 9 to 15. The catalog was created to provide photometric calibrators for the *HST Guide Star Catalog*. Each sequence nominally contains (at least) six stars, each with a photometric precision of 0.05 mag. In practice, a small number of sequences contain fewer stars; and the precisions achieved for the faintest stars are more nearly 0.1 mag. For declinations greater than  $+3^\circ$  the sequences generally lie near the centers of the original *Palomar Observatory - National Geographic Society Sky Atlas*. Other sequences lie near the centers of the *ESO/SERC Southern Sky Atlas*. The catalog also includes a list of suspected variable stars, a bibliography of literature sequences, and additional information that was useful in the data reduction and for quality control of the final catalog.

**Reference:**

- Lasker, B.M., Sturch, C.R., Lopez, C., Mallama, A.D., McLaughlin, S.F., Russell, J.L., Wisniewski, W.Z., Gillespie, B.A., Jenkner, H., Siciliano, E.D., Kenny, D., Baumert, J.H., Goldberg, A.M., Henry, G.W., Kemper, E., and Siegel, M.J. 1988, *ApJS*, 68, 1

**File Information:** 21 files, 790 Kbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Description for machine version

## ADC 2156A

Moshir, M., et al.

IRAS Faint Source Catalog,  $|b| > 10^\circ$ , Version 2.0 (1989)**Keywords:** *infrared sources; infrared photometry; surveys*

**Description:** The Faint Source Survey (FSS) is the definitive Infrared Astronomical Satellite data set for faint point sources. The FSS was produced by point-source filtering the individual detector data streams and then coadding those data streams using a trimmed-average algorithm. The resulting images, or plates, give the best estimate from the IRAS survey data of the point source flux density at every surveyed point of the sky. The *Faint Source Catalog (FSC)* is a compilation of the sources extracted from the FSS plates that have met reasonable reliability requirements. Averaged over the whole catalog, the *FSC* is at least 98.5% reliable at  $12\ \mu$  and  $25\ \mu$ , and 94% at  $60\ \mu$ . For comparison, the *IRAS Point Source Catalog (PSC)* is >99.997% reliable, but the sensitivity of the *FSC* exceeds that of the *PSC* by about a factor of 2.5. The *FSC* contains data for 173044 point sources in unconfused regions with flux densities typically above 0.2 Jy at 12, 25, and  $60\ \mu$  and above 1.0 Jy at  $100\ \mu$ . The FSS plates are somewhat more sensitive but less reliable than the *FSC*; typically, only sources with  $S/N > 5-6$  in the plates are contained in the *FSC*. Sources with  $S/N > 3$  but that do not meet the reliability requirements of the *FSC* are cataloged in the Faint Source Reject File (FSR). The data products, the processing methods used to produce them, results of an analysis of these products, and cautionary notes are given in the *Explanatory Supplement* to the IRAS Faint Source Survey (see reference).

**References:**

- Moshir, M., Copan, G., Conrow, T., McCallon, H., Hacking, P., Gregorich, D., Rohrbach, G., Melnyk, M., Rice, W., Fullmer, L., and Chester, T.J. 1989, *Infrared Processing and Analysis Center*
- Moshir, M., Copan, G., Conrow, T., McCallon, H., Hacking, P., Gregorich, D., Rohrbach, G., Melnyk, M., Rice, W., Fullmer, L., and Chester, T.J. 1992, *Explanatory Supplement to the IRAS Faint Source Survey, Version 2, JPL D-10015*

**File Information:** 3 files, 54.1 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Full documentation available

## ADC 2158A

Hauck, B., and Mermilliod, M.

uvby $\beta$  Photoelectric Photometric Catalogue (1990)**Keywords:** *uvby photometry, beta*

**Description:** The catalog is a compilation of uvby and H- $\beta$  photoelectric photometric data published in the literature through the end of 1988. It supersedes an earlier edition by the same compilers (Hauck and Mermilliod 1985). All individual observations are given in one file, while a separate file contains a single set of homogeneous means for each object. Other files give the complete set of

bibliographical references and a definition of the Geneva coded numbering system used to identify the stars. The compilation includes 69190 observations of 44896 stars. The homogeneous means were computed using the method of Lindemann and Hauck (1973). This method refers each source back to the standard system and compares all stars in common. Weights are computed based on this comparison, then used when the final means are computed for each star. In general, these means will be the best values for each object but may not be suitable for all applications, especially when variability is suspected. The data in the observations file include coded number (identifier), double and variable codes, V magnitude, uvby, beta indices and numbers of observations, and reference code. The homogeneous means file contains only the object identifier and the homogeneous indices of the uvby, beta system. (No V magnitudes are included in the means file.)

#### References:

Hauck, B., and Mermilliod, M. 1990, *A&AS*, **86**, 107

Hauck, H., and Mermilliod, M. 1985, *A&AS*, **60**, 61

Lindemann, E., and Hauck, H. 1973, *A&AS*, **11**, 119

**File Information:** 8 files, 10.1 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 2160**

Edvardsson, B., and Bell, R.A.

### Theoretical Colours and Isochrones for some Hubble Space Telescope Colour Systems (1989)

**Keywords:** *colors; isochrones; surface photometry*

**Description:** This data set contains two related data types. The first (one file) is a grid of synthetic surface brightness magnitudes for 21 of the Hubble Space Telescope Wide Field Camera (WFC) pass-bands. The magnitudes are calculated from a new set of synthetic spectra for effective temperatures in the range 4000K to 7250K, surface gravities typical of dwarfs and subgiants, and for metallicities in the range solar to one-thousandth solar (280 synthetic spectra). The second is the absolute magnitudes for each of the 21 pass bands for a set of globular cluster isochrones with different helium abundances, metallicities, oxygen abundances and ages. The isochrones were taken from Van den Berg and Bell (1985), Bell and Van den Berg (1987), Hesser et al. (1987), and McClure et al. (1987), all of whom originally published them for the Cousins VRI, Johnson UBV, Strömgren, and Thuan-Gunn photometric systems.

#### References:

Edvardsson, B., and Bell, R.A. 1989, *MNRAS*, **238**, 1121

Bell, R.A., and Van den Berg, D.A., 1987 *ApJS*, **63**, 335

Hesser, J.E., Harris, W.E. Van den Berg, D.A., Allwright, J.W.B., Shott, P., and Stetson, P.B. 1987, *PASP*, **99**, 739

McClure, R.D., Van den Berg, D.A., Bell, R.A., Hesser, J.E., and Stetson, P.B. 1987, *AJ*, **93**, 1144

Van den Berg, D.A., and Bell, R.A. 1985, *ApJS*, **58**, 561

**File Information:** 14 files, 165 Kbytes      **Status:** Has been checked for consistency  
 Documentation in hard copy form only  
 Available via network

**ADC 2168**

Mermilliod, J.C.

**Catalogue of Homogeneous Means in the UBV System (1991)**

**Keywords:** *UBV photometry*

**Description:** The present catalog supersedes an earlier edition of Nicolet (1978). It is a collection of weighted mean photoelectric values (V, B-V, U-B) for stars measured in the UBV system. The mean values were computed by combining all individual measurements compiled in the catalog of Mermilliod (1987), except those that were clearly found to be erroneous for some reason or another. Some newer observations compiled since 1987 are also included in the means. The procedure for computing the homogeneous means involved the calculation of normal averages weighted by the number of observations in each list (unity when not published). New weights are assigned based on the deviation of each value from the previous mean; then a new weighted mean is computed. This technique is not as rigorous as that used by Nicolet (comparison of each list with the standard system master list), but the latter cannot often be realized effectively in practice since many lists do not contain enough stars in common with a standard list. Also, there are now so many references (more than 1500) that it is not feasible to analyze each publication with respect to a standard list. This edition of the catalog contains 92964 stars measured since the introduction of the UBV system in 1953. The data included are star identification in the Geneva coded numbering system, double and variable codes, UBV data and their standard deviations, and number of observations. A second file contains the definition of the coded numbering system. The catalog was prepared at the Institut d'Astronomie de l'Université de Lausanne in Geneva.

**References:**

- Mermilliod, J.C. 1991, Institut d'Astronomie, Université de Lausanne (to be published)  
 Mermilliod, J.-C. 1987, A&AS, 71, 413  
 Nicolet, B. 1978, A&AS, 34, 1

**File Information:** 3 files, 6.59 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 2169**

Rufener, F.

**Catalogue of Stars Measured in the Geneva Observatory Photometric System, 4th edition (1988)**

**Keywords:** *Geneva photometry*

**Description:** This catalog is a successor to an earlier edition (Rufener 1981). It is a compilation of photoelectric measurements made in the Geneva Observatory seven-color photometric system. This edition contains data for 29397 stars. Observations on the Geneva system are made through three wide- and four intermediate-band filters extending from about 350 to 570 nm. The indices of the system measure such parameters as effective temperature, luminosity, blocking by metallic lines, the size of the Balmer discontinuity, and the importance of line blocking in the 380-480-nm wavelength range. Taken together, the photometric indices allow a three-dimensional representation of stars in the A0 to G5 spectral range. Additional details can be found in Golay (1973). The catalog includes star identifications (*HR*, *HD*, *DM*); equatorial coordinates (B1950.0); the normalized magnitudes of the system (U, V, B1, B2, V1, G); the color indices (B1-B2, B2-V1, V1-G); the parameters *d*, *δ*, *g*, *m*<sub>2</sub>; and the V magnitude on the UBV system. The numbers of measurements and standard deviations are included separately for the colors and the V magnitude.

**References:**

Rufener, F. 1988, Geneva Observatory

Golay, M. 1973, in IAU Symposium No. 50, Spectral Classification and Multicolor Photometry, eds. Ch. Fehrenbach and B.E. Westerlund (Dordrecht, Reidel), p. 145

Rufener, F. 1981, A&AS, 45, 275

**File Information:** 5 files, 5.84 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 2171**

Parenago, P.P.

**Machine-Readable Version of the Parenago Catalogue of Stars in the Area of the Orion Nebula (1954)**

**Keywords:** *photographic magnitudes; nebulae*

**Description:** This data set contains a catalogue of stars in the area of the Orion Nebula, right ascension  $5^h24^m$  to  $5^h36^m$ , declination  $-4^\circ$  to  $-7^\circ$  (1900.0). The data have been slightly reorganized compared to the original printed version. Each stellar entry in the catalog has a sequence number, position (1900.0), photographic magnitude, photovisual magnitude (if available), variable star ID (if variable), and spectral type (if available).

**References:**

Parenago, P.P. 1954, Trudy Gos. Astron. Inst. im. Shternberga, 25

Malkov, O.Yu. 1992, CDS Bull. No. 40, p. 13

**File Information:** 2 files, 157 Kbytes      **Status:** Has been checked for consistency  
 Available via network

**ADC 2172**

Kholopov, P.N., et al.

General Catalogue of Variable Stars, Fourth Edition, Vol. IV (1990)

**Keywords:** *variable stars*

**Description:** The catalog is the computer-readable version of vol. IV of the *General Catalogue of Variable Stars (GCVS)*. It consists of 33 tables that contain identifications of all *GCVS* and *NSV* stars as well as stars from the name-lists numbers 67-70. All are arranged in the alphabetical order of their abbreviated names. It differs from the printed version in a number of important ways. The machine-readable version omits the list of variable stars arranged by right ascension and the list of stars by variability type. (This was a deliberate choice of the authors as those lists can be found in the earlier versions.) Its cross-identification tables include additional catalogs and lists not found in the printed version as follows:

- Preliminary variable star designations of *Astronomische Nachrichten (AN)*.
- Preliminary designations of variables discovered in *Sonneberg (S)*.
- *Smithsonian Astrophysical Observatory Star Catalog (SAO)*.
- List of optically variable X-ray sources designated by their galactic coordinates (gx).
- List of optically variable X-ray sources designated by their equatorial coordinates (gx).
- List of optically variable X-ray source with designations in constellations (xx).

The machine-readable version also contains stars of the sevenieth name list of variable stars and all corrections found in the year between the publication of the printed volume and release of the computer edition.

**References:**

- Kholopov, P.N., Samus', N.N., Durlevich, O.V., Kazarovets, E.V., Kireeva, N.N., and Tsvetkova, T.M. 1990, *Nauka*, ISBN 5-02-007277-X, (Moscow: Nauka Publishing House)
- Kholopov, P.N., Samus', N.N., Durlevich, O.V., Kazarovets, E.V., Kireeva, N.N., and Tsvetkova, T.M. 1992, *CDS Bull. No. 40*, p. 15
- Kukarkin, B.V., Kholopov, P.N., Artiukhina, N.M., Fedorovich, V.P., Frolov, M.S., Goranskij, V.P., Gorynya, N.A., Karitskaya, E.A., Kireeva, N.N., Kukarkina, N.P., Kurochkin, N.E., Medvedeva, G.I., Perova, N.B., Ponomareva, G.A., Samus', N.N., Shugarov, S. Yu, 1982, *New Catalogue of Suspected Variable Stars (NSV)* (Moscow: Nauka Publishing House) (ADC 2140)

**File Information:** 3 files, 2.75 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Description for machine version

**ADC 2174**

Strauss, M.A., et al.

**IRAS 2Jy Redshift Survey (1990)**

**Keywords:** *infrared sources; infrared photometry; redshifts*

**Description:** This catalog contains the data from a redshift survey of sources selected from the *Infrared Astronomical Satellite Point Source Catalog*. The sample is flux limited to 1.936 Jy at  $60\mu$ , and a color criterion,  $f_{60} > \sqrt{(f_{12} * f_{25})}$ , where  $f_w$  is the flux density at wavelength  $w$ , was used to select galaxies over stars and other objects of this Galaxy. Confusion-limited areas (at  $60\mu$ ), including the Galactic plane at latitudes below  $5^\circ$ , were rejected as were areas not surveyed by IRAS at least twice, resulting in coverage of 11.01 sr of the sky. The catalog describes 5014 objects of which 2658 are galaxies. The remaining 2356 sources are listed separately with identifications which, in most cases, were based on source appearance on the Sky Survey plates. Redshift data are also given for 212 IRAS galaxies that are not part of the complete sample.

**References:**

- Strauss, M.A., Davis, M., Yahil, A., and Huchra, J.P. 1990, *ApJ*, 361, 49  
 Strauss, M.A., Huchra, J.P., Davis, M., Yahil, A., Fisher, K.B., and Tonry, J. 1992, *ApJS*, 83, 29

**File Information:** 4 files, 691 Kbytes      **Status:** Has been checked for consistency  
 Available via network

**ADC 2178**

Axon, D.J., and Ellis, R.S.

**A Catalogue of Linear Polarization Measurements for 5070 Stars (1976)**

**Keywords:** *polarization*

**Description:** The authors have collected and collated measurements of linear polarization of starlight from Hiltner, Smith, Hall, Behr, Appenzeller, Mathewson and Ford, Klare et al., and Schröder. These are presented in a catalog for stars with reliable distances that lists the Stokes parameters  $Q$  and  $U$ . The galactic latitude and longitude and distance are also given.

**References:**

- Axon, D.J., and Ellis, R.S. 1976, *MNRAS*, 177, 499  
 Appenzeller, I. 1966, *Z. Astrophis*, 64, 296  
 Appenzeller, I. 1968, *ApJ*, 151, 197  
 Behr, A. 1959, *Veröff. U. Sternw. Göttingen*, No. 126  
 Hall, J.S. 1958, *Publ. U.S. Naval Obs. 2nd ser.*, Vol. 17, No. VI  
 Hiltner, W.A. 1951, *ApJ*, 114, 241  
 Hiltner, W.A. 1954a, *ApJ*, 120, 41  
 Hiltner, W.A. 1954b, *ApJ*, 120, 454  
 Hiltner, W.A. 1956, *ApJS*, 2, 389  
 Klare, G. Neckel, Th., and Schnuur, G. 1971, *A&A*, 11, 155  
 Mathewson, D.S., and Ford, V.L. 1970, *MmRAS*, 74, 139  
 Schröder, R. 1976, *A&AS*, 23, 125  
 Smith, E. van P. 1956, *ApJ*, 124, 23

**File Information:** 4 files, 428 Kbytes      **Status:** Has been checked for consistency  
 Available via network  
 Full documentation available

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**ADC 2181**

Schwering, P.B.W., and Israel, F.P.

**Atlas and Catalogue of IR Sources in the Magellanic Clouds (1990)****Keywords:** *clusters of galaxies; infrared sources; Magellanic Clouds; nebulae***Description:** The authors have used the IRAS data to construct maps of the Magellanic Clouds at wavelengths of 12, 25, 60, and 100  $\mu$ . These are contained in the published volume only. The position and characteristics of each source are included in this compilation. Also included are cross references to sources at other wavelengths (H- $\alpha$  emission nebulae, dark clouds, and stars) when these could be reasonably identified with the IR sources. IRAS IDs and the DPM field are also given.**Reference:**

Schwering, P.B.W., and Israel, F.P. 1990, Kluwer Academic Publishers, Dordrecht/Boston/London

**File Information:** 5 files, 395 Kbytes      **Status:** Has been checked for consistency  
Available via network  
Full documentation available

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**ADC 2901**

Strömgren, B., and Perry, C.L.

**Strömgren-Perry uvby Colors (1965)****Keywords:** *uvby photometry***Description:** The catalog contains photoelectric uvby photometry for 1217 stars brighter than  $V=6.5$  mag, mostly of spectral classes A, F, and G. The photometry was obtained with the 20-inch reflector of Mount Palomar Observatory and the 36-inch and 16-inch reflectors of Kitt Peak National Observatory. The catalog includes star names, right ascension and declination (B1950);  $V$  magnitudes; the color indices  $b-y$ ,  $m1$ ,  $c1$ ; spectral types; and cross numbering systems of *The Bright Star Catalogue*, *The Henry Draper Catalogue*, and the *Durchmusterung* catalogs.**Reference:**

Strömgren, B., and Perry, C.L. 1965, unpublished

**File Information:** 1 file, 140 Kbytes      **Status:** Has been checked for consistency  
Available in microform versions  
Documentation in hard copy form only  
Available via network

### 3.3 Spectroscopic Data

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**ADC 3009A**

Upgren Jr., A.R.

**F2-G5 Stars in a North Galactic Pole Region (1963)****Keywords:** *north Galactic pole; regional catalog*

**Description:** The catalog is an objective-prism survey for stars of spectral classes F2 to G5 in a region of high galactic latitude. The catalog contains 1127 stars and is complete to a limiting photographic magnitude of 12.5. The photographic plates used permit a separation of the stars into narrow and well-defined spectral classes. The spectral classification of the stars in the catalog is based on the Yerkes MK system. The catalog is subdivided into one-degree declination zones as are the *DM* catalogs. The degree zones are based on 1855 coordinates. The catalog includes sequence numbers of the stars, *BD* and *HD* numbers, positions (B1950), B magnitudes, spectral types, and remarks.

**Reference:**Upgren Jr., A.R. 1963, *AJ*, 68, 194

**File Information:** 2 files, 53.9 Kbytes      **Status:** Has been checked for consistency  
Available via network  
Description for machine version

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**ADC 3010A**

Upgren Jr., A.R.

**G5 and Later Stars in a North Galactic Pole Region (1962)****Keywords:** *north Galactic pole; regional catalog*

**Description:** The catalog is an objective-prism survey of late-type stars in a region of 396 square degrees surrounding the north galactic pole. The objective-prism spectra employed have a dispersion of 580 Å/mm at H- $\gamma$  and extend into the ultraviolet region. The catalog contains the magnitudes and spectral classes of 4027 stars of class G5 and later, complete to a limiting photographic magnitude of 13.0. The spectral classification of the stars is based on the Yerkes system. The catalog includes the serial numbers of the stars corresponding to the numbers on the identification charts, *BD* and *HD* numbers, B magnitudes, spectral classes, and letters designating the subregion and identification chart on which each star is located.

**Reference:**Upgren Jr., A.R. 1962, *AJ*, 67, 37

**File Information:** 3 files, 192 Kbytes      **Status:** Has been checked for consistency  
Available via network  
Description for machine version

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**ADC 3011A**

Upgren Jr., A.R., and Staron, R.T.

**F2 and Earlier Stars in S.A. 28, 54, 106, 107 (1969)****Keywords:** *selected areas*

**Description:** The catalog contains the results of an objective-prism survey for 498 stars of spectral classes F2 and earlier, brighter than magnitude 11.5, in four regions of intermediate galactic latitude. This objective-prism survey is part of a study of stellar densities aiming at the determination of the inclination to the galactic plane of surfaces of equal stellar density. Each region is centered on one of the Selected Areas 28, 54, 106, and 107. The fields, 4 x 4 degrees in size, were each photographed on two IIA-O emulsion plates, one with an exposure time of three minutes on which bright stars could be classified and one with an exposure time of 40 minutes extending to faint stars. The plates were taken with the 24-inch Baker-Schmidt telescope of the Dyer Observatory. The dispersion of the objective prism is about 330 Å/mm at H-γ. The stars were classified according to the criteria established by Nassau and Seyfert (1946) and Nassau and van Albada (1947). Photographic magnitudes were found from direct IIA-O plates taken with the eight-inch Ross camera of the Yale Observatory. The catalog includes *BD* numbers, magnitudes, and spectral classes for *BD* stars. For non-*BD* stars, the *BD* number listed in column (1) indicates a nearby *BD* star from which the star listed is offset, as indicated by the data of columns (2) and (3).

**References:**Upgren Jr., A.R., and Staron, R.T. 1969, *ApJ*, 157, 327Nassau, J.J., and Seyfert, C.K. 1946, *ApJ*, 103, 117Nassau, J.J., and van Albada, G.B. 1947, *ApJ*, 106, 20

**File Information:** 3 files, 14.3 Kbytes      **Status:** Has been checked for consistency  
 Available via network  
 Description for machine version

**ADC 3012A**

Upgren Jr., A.R., and Staron, R.T.

**F5 and Later Stars in S.A. 28, 54, 106, 107 (1970)****Keywords:** *selected areas*

**Description:** The catalog is an objective-prism survey of 2181 stars later than spectral class F2; the earlier stars are in ADC catalog 3011A. The limiting magnitude is about 11.5. Four regions of intermediate galactic latitude are included in this survey. Each region is centered on one of the Selected Areas 28, 54, 106, and 107 and consists of a square 7 degrees on a side or about 50 square degrees in area. The fields, 4° x 4° in size, were each photographed on two IIA-O emulsion plates, one with an exposure time of three minutes on which bright stars could be classified and one with an exposure time of 40 minutes extending to faint stars. The plates were taken with the 24-inch Baker-Schmidt telescope of the Dyer Observatory. The dispersion of the objective prism is about 330 Å/mm at H-γ. The stars were classified according to the criteria established by Nassau and Seyfert (1946) and Nassau and van Albada (1947). Photographic magnitudes were found from direct IIA-O

plates taken with the 8-inch Ross camera of the Yale University Observatory. The catalog includes *BD* numbers, magnitudes, and spectral classes for *BD* stars. For non-*BD* stars, the *BD* number listed in column (1) indicates a nearby *BD* star from which the star listed is offset by the values in columns (2) and (3) given in minutes of arc.

**References:**

Uppgren Jr., A.R., and Staron, R.T. 1970, *ApJS* 19, 367

Nassau, J.J., and Seyfert, C.K. 1946, *ApJ*, 103, 117

Nassau, J.J., and van Albada, G.B. 1947, *ApJ*, 106, 20

**File Information:** 3 files, 65.3 Kbytes      **Status:** Has been checked for consistency  
Available via network  
Description for machine version

**ADC 3014A**

Slettebak, A., and Stock, J.

**A Finding List of Stars F2 and Earlier in a North Galactic Pole Region (1959)**

**Keywords:** *north Galactic pole*

**Description:** The catalog is the result of an objective-prism survey made with the Hamburg 80-cm/120-cm Schmidt telescope. The F2 and earlier stars were isolated from later-type objects by using the MK classification criteria discussed in the source reference. The catalog contains 601 stars and includes cross identifications to the numbering systems of the *BD* and *HD* catalogs, coordinates (equinox B1950.0), photographic magnitudes, and spectral types. The catalog consists of three files. The first two files contain data. File 1 is for *BD* stars and File 2 is for non-*BD* stars. File 3 contains the remarks from the original data tables merged with those following the data.

**Reference:**

Slettebak, A., and Stock, J. 1959, *Hamburger Sternwarte* 5, No. 5

**File Information:** 3 files, 42.1 Kbytes      **Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 3017B**

Wackerling, L.R.

**Catalogue of Early-Type Stars Whose Spectra Have Shown Emission Lines (1970)**

**Keywords:** *emission stars; early-type stars; Be stars*

**Description:** The catalog contains 5326 early-type emission-line stars. Of these, 1424 have no spectral classification but are assumed to be of early type. Some 71% of the stars listed here can also be found in the Mount Wilson and the Mount Wilson-Michigan survey catalogs. The catalog contains numerous cross identifications to other designations (name, *HD*, *DM*, *LS*, *MWC*, *TON*, *HIL*, *WRA*, *HEN*, etc.), spectroscopic type, magnitudes (visual and blue), equatorial (B1900 and B1950), and

galactic coordinates.

**Reference:**

Wackerling, L.R. 1970, *MmRAS*, 73, 153

**File Information:** 2 files, 1000 Kbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 3018B**

Jaschek, C., Conde, H., and de Sierra, A.C.

**Catalogue of Stellar Spectra Classified in the Morgan-Keenan System (1964)**

**Keywords:** *MK spectral classification; spectral types*

**Description:** The purpose of this catalog is to provide bibliographic references to spectral classifications of stars in the Morgan-Keenan system published in the literature prior to January 1963. The catalog includes, with few exceptions, only objects contained in the *Durchmusterungen*: *BD*, *SD*, *CD*, and *CPD*. Objects belonging to stellar clusters and extragalactic nebulae were excluded from the catalog if they are not listed in the *Durchmusterungen*. The catalog includes sequential numbers, *HD* and *DM* numbers, right ascension and declination (B1900.0), magnitudes, spectral classifications, and bibliographic references. This machine-readable version was modified and corrected with errata at the Astronomical Data Center, NASA/GSFC.

**Reference:**

Jaschek, C., Conde, H., and de Sierra, A.C. 1964, *Publ. La Plata Obs., Ser. Astron.* 28, No. 2

**File Information:** 2 files, 2.54 Mbytes      **Status:** Has been checked for consistency  
 Available in microform versions  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 3021**

Wilson, R.E.

**General Catalogue of Stellar Radial Velocities (1953)**

**Keywords:** *radial velocities*

**Description:** The machine-readable catalog is a corrected version of the original published one. It contains the radial velocities of 15106 galactic stars. This is more than twice the number of stars in the Moore catalog, which was the standard reference for radial velocities previously. The standard system adopted is that based on the Lick III-prism observations. The catalog includes right ascension and declination (B1950.0), visual magnitudes, proper motions, spectral types, galactic coordinates,

and cross identifications to the numbering systems of the *Boss General Catalogue* and *The Henry Draper Catalogue*.

**Reference:**

Wilson, R.E. 1953, Carnegie Inst. Washington Publ. 601

**File Information:** 2 files, 1.39 Mbytes      **Status:** Has been checked for consistency  
 Available in microform versions  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 3023B**

Lesh, J.R.

**MK Classification for OB Stars (1968)**

**Keywords:** *MK spectral classification; OB stars; spectral types*

**Description:** The catalog is a compilation of MK spectral types published in the paper, "The Kinematics of the Gould Belt: An Expanding Group?" (Rountree Lesh 1968). Spectral types were determined for 464 stars of Henry Draper type B5 and earlier, brighter than 6.5 visual magnitude and higher than  $-20^\circ$  in declination. The spectra were classified by the author using plates taken with the Yerkes 40-inch refractor and MK spectrograph. The catalog contains HR, *HD* numbers, MK types with temperature classes, subclasses, luminosity classes and peculiarities, and remarks.

**Reference:**

Lesh, J.R. 1968, *ApJS*, 17, 371

**File Information:** 2 files, 15.9 Kbytes      **Status:** Has been checked for consistency  
 Documentation in hard copy form only  
 Available via network

**ADC 3029B**

Crampton, D., Leir, A.A., and Younger, F.

**A Catalogue of H Gamma Measures of R. M. Petrie (1973)**

**Keywords:** *H- $\gamma$  photometry*

**Description:** The catalog is a compilation of equivalent widths of H-gamma for early-type stars, not only from published material but also from the numerous card files kept by R.M. Petrie. The luminosities of early-type stars through the measurement of the equivalent width of H- $\gamma$  are relatively precise, although the early work was hampered by systematic errors in the absolute-magnitude calibrations. In a number of cases, the values of the equivalent width for a given star differ slightly from publication to publication. There are three possible reasons for this: 1) The later publications may include measurements of additional spectra; 2) in some cases the values were included in the average; 3) some initial measures had not included the extremities of the very extensive wings of H- $\gamma$  in the

spectra of A stars.

**Reference:**

Crampton, D., Leir, A.A., and Younger, F. 1973, *Publ. Dom. Astrophys. Obs.* 14, 151

**File Information:** 1 file, 91.5 Kbytes

**Status:** Has been checked for consistency  
Available in microform versions  
Documentation in hard copy form only  
Available via network

**ADC 3030A**

Bernacca, P.L., and Perinotto, M.

**A Catalogue of Stellar Rotational Velocities (1970-1973)**

**Keywords:** *rotational velocities*

**Description:** The catalog contains 1005 main-sequence single stars; 360 spectroscopic and eclipsing binaries; 189 Be and shell stars; 243 peculiar B- and A-type stars, and 1277 supergiants, giants, and subgiants, for which  $v \sin i$  has been determined from 1949 to 1970. Rotational data are essentially in the Slettebak-Kraft system. The catalog provides visual magnitudes, color indices, galactic coordinates, spectral classifications, absolute visual magnitudes, adopted rotational velocities, descriptive information, binary types, luminosity classes, orbital periods, right ascension and declination (B1900.0), and cross identifications to the numbering systems of *The Henry Draper Catalogue (HD)*, the *Durchmusterung* catalogs, and *Aitken Double Stars Catalogue (ADS)*.

**Reference:**

Bernacca, P.L., and Perinotto, M. 1970-1973, *Contrib. Oss. Asiago Nos.* 239, 250, 294

**File Information:** 1 file, 460 Kbytes

**Status:** Has been checked for consistency  
Available in microform versions  
Documentation in hard copy form only  
Available via network

**ADC 3036A**

Stephenson, C.B.

**A General Catalogue of Cool Carbon Stars (1973)**

**Keywords:** *carbon stars; magnitudes; MK spectral classification*

**Description:** A catalog of 3219 cool carbon stars of which over 500 were previously unpublished. Cool carbon stars are defined as stars whose spectra a low dispersion (no better than 1-2 Å) are known to show bands of the Swan system of the  $C_2$  molecule. For each of the stars in the catalog, photographic, visual, and infrared magnitudes; a spectral classification; and both equatorial and galactic coordinates are given. This machine version of the catalog contains the following differences to the original printer version: (1) The equatorial coordinates have been quota only to arcseconds for

right ascension and to tenths of an arcsecond for declination; and (2) the galactic coordinates have been calculated from the equatorial coordinates rather than using the original printed numbers.

**Reference:**

Stephenson, C.B. 1973, Publ. Warner and Swasey Obs. 1, No. 4

**File Information:** 1 file, 389 Kbytes

**Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 3039A**

Jamar, C., et al.

**Ultraviolet Bright Star Spectrophotometric Catalogue (1976)**

**Keywords:** *spectrophotometry; bright stars; ultraviolet spectra*

**Description:** The catalog contains observations carried out by the S2/68 Ultraviolet Sky Survey Telescope (UVSST) aboard the ESRO Satellite, TD-1. The data presented in the catalog were obtained during the first observation period, which lasted from 19 March 1972 to 31 October 1972. The spectrum was formed on the focal surface of the spectrophotometer with a dispersion of 36 Å/mm. The catalog includes fluxes for each of 61 wavelengths from 1360 Å to 2540 Å in 20 Å steps and at 2740 Å, right ascension and declination (equinox B2000.0), spectral types, luminosity classes, visual magnitudes, colors, rotational velocities, references for source material, and cross identifications to the numbering system of *The Henry Draper Catalogue*.

**Reference:**

Jamar, C., Macau-Hercot, D., Monfils, A., Thompson, G.I., Houziaux, L., and Wilson, R. 1976, ESA SR-27

**File Information:** 2 files, 929 Kbytes

**Status:** Has been checked for consistency  
Available via network  
Available on CD-ROM  
Full documentation available

**ADC 3042**

Jaschek, M.

**Catalogue of Selected Spectral Types in the MK System (1978)**

**Keywords:** *MK spectral classification; spectral types*

**Description:** The catalog provides a single spectral type for each star listed in the La Plata catalog (Jaschek, Conde, and de Sierra 1964) and in the MK Extension (Kennedy 1978). In all cases the classifications are selected from those in the literature and have not been made by the author specifically for this compilation. A selected classification is considered to be the best one but is not necessarily a good one. If only one classification exists for a given object it is given regardless of its quality. The classifications were selected using a weighting system, with highest weight being given to

classifications made by Morgan and/or Keenan, somewhat lower weight to those made by other spectral classification experts and various lower weights to those made by other workers. Classifications using designations that do not appear in the MK system have been excluded as have objective-prism classifications, except where no slit spectra were available. The machine-readable catalog contains a running number in one of the original catalogs (sequential numbers in the machine versions), identification of the original catalog, star identification (*HD*, *DM*, miscellaneous designations), equatorial coordinates (B1900), magnitude (V if available,  $m_v$ , otherwise) for reference purposes, reference number in the original catalog, selected classification, dispersion information, and number of the reference in the *Bibliographical Star Index* (*BSI*, Spite et al. 1980, now in SIMBAD). A second file contains a list of 1029 references given by BSI coded numbers.

#### References:

Jaschek, M. 1978, *CDS Bull. No. 15*, p. 121

Jaschek, C., Conde, H., and de Sierra, A.C. 1964, *Catalogue of Stellar Spectra Classified in the Morgan-Keenan System*, Publ. La Plata Obs., Ser. Astron. 28 (2)

Kennedy, P.M. 1978, *MK Classification Extension*, Mt. Stromlo Observatory

Spite, F., Kirchner, S., Lahmek, R., and Ochsenbein, F. 1980, *Bull. Inform. CDS No. 18*, p. 89

**File Information:** 2 files, 3.45 Mbytes      **Status:** Has been checked for consistency  
Available in microfiche version  
Documentation in hard copy form only  
Available via network

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**ADC 3048B**

Breger, M.

### Spectrophotometric Scans (1976)

**Keywords:** *spectrophotometry*

**Description:** This data set contains 937 sets of spectrophotometric observations of stellar continua made in the 3200-12000 Å region. The data were transformed to the Hayes and Latham (1975) calibration of Alpha Lyrae. Bandpasses vary between 10 Å and 100 Å. An analysis of the errors in the catalog appears in Breger (1976). Note that scans of the southern stars observed by Gutierrez-Moreno et al. (1968) are NOT corrected for the right ascension effects discussed in Breger (1976).

#### References:

Breger, M. 1976, *ApJS*, 32, 7

Breger, M. 1976, *ApJS*, 32, 1

Gutierrez-Moreno A., Moreno, H., and Stock, J. 1968, *Univ. Chile Dept. of Astr. Pub.* 8, 127

Hayes, D.S., and Latham, D.W. 1975, *ApJ*, 197, 593

**File Information:** 1 file, 430 Kbytes      **Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

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**ADC 3051B**

Houk, N.

**Michigan Catalogue of Two-Dimensional Spectral Types for the HD Stars, Vol. 2  
(1978)****Keywords:** *spectral types; MK spectral classification*

**Description:** This volume of the catalog contains all *HD* stars between  $-53.0^\circ$  and  $-40.0^\circ$  in B1900 declination and is part of a series of catalogs in the University of Michigan program of systematic reclassification in the MK system of the entire *Henry Draper Catalogue (HD)*. The stars were classified visually on objective-prism plates taken with the Michigan Curtis-Schmidt telescope at Cerro Tololo Inter-American Observatory. The  $4^\circ$  and  $6^\circ$  prisms yield a dispersion at H- $\gamma$  of 108 Å/mm, with a resolution of about 2 Å/mm, comparable to that of the original MK system. The spectra were taken on IlaO plates and widened to 0.8 mm, with 20-, 4-, and 1-min exposures being obtained. The catalog *BD* includes spectral classifications, photographic magnitudes, right ascension and declination (B1900), centennial precessions, galactic coordinates, and cross identifications to the numbering systems of the *HD*, *CD*, and *CPD* catalogs.

**Reference:**

Houk, N. 1978, U. Michigan

**File Information:** 3 files, 5.28 Mbytes      **Status:** Has been checked for consistency  
Available via network  
Available on CD-ROM  
Full documentation available

**ADC 3060**

Stephenson, C.B.

**General Catalogue of S Stars (1976)****Keywords:** *S stars*

**Description:** The catalog is intended to list all S stars having known positions of at least roughly the precision of *The Henry Draper Catalogue*. An S star is a star in whose spectrum the bands of the ZrO molecule are detectable, ordinarily without needing sufficient spectral resolution to resolve the individual rotational lines of a band in its stronger parts. The majority of the stars in the catalog were classified on the basis of the band with a head near 6474 Å, in the red system of ZrO. The catalog contains right ascension and declination (B1900.0), photographic, visual, or infrared magnitudes; spectral types; and designations that give the star's occurrence in various finding lists, including an unpublished one.

**Reference:**

Stephenson, C.B. 1976, Publ. Warner and Swasey Obs. 2, No. 2

**File Information:** 2 files, 201 Kbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 3063B**

Uesugi, A., and Fukuda, I.

**Revised Catalogue of Stellar Rotational Velocities (1982)****Keywords:** *rotational velocities*

**Description:** The catalog provides mean  $v \sin i$  data on the old Slettebak system for 6472 stars. The mean values result from the review, analysis, and transformation of 11460 data from 102 sources. Data included in the machine-readable catalog are star identification (major catalog number, name, cluster identification, etc.); mean projected rotational velocity,  $v \sin i$ ; uncertainty indicator; number of individual published values included in the mean (not the total of all individual observations from all sources, but the number of sources); and source reference numbers for all published values included in the mean. A second file contains the references by number cited in the data file. This version of the catalog is comprehensive and supersedes the earlier compilation of Uesugi and Fukuda (1970).

**References:**

Uesugi, A., and Fukuda, I. 1982, Department of Astronomy, Kyoto University  
 Uesugi, A., and Fukuda, I. 1970, A Catalog of Rotational Velocities of the Stars, Mem. Fac. Sci. Kyoto Univ., Ser. Phys., Astrophys., Geophys., Chem. 33, 205

**File Information:** 3 files, 554 Kbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 3067A**

Jaschek, M., and Egret, D.

**Catalog of Be Stars (1982)****Keywords:** *Be stars*

**Description:** The catalog is a compilation of about 1100 Be stars. The definition of a Be star in the catalog is that of a non-supergiant B star that has shown emission in one Balmer line at least once. For this reason with one exception, all stars for which no MK classification exists have been excluded as have planetary nebulae and spectroscopic binaries. It is important to note that MK types are established in a wavelength region in which H- $\alpha$  is not included. Therefore, many stars having H- $\alpha$  in emission are classified as normal stars, being called, for instance, B3 V, not B3 Ve. The catalog includes *DM* and *HD* identifications, numbers in the main lists of emission-line stars, coordinates, V magnitudes and UB $\nu$  photometry (when available from Nicolet's [1978] compilation), adopted MK classifications, radial velocities, rotational velocities, and bibliographical references in a

separate file.

**References:**

- Jaschek, M., and Egret, D. 1982, IAU Symp. 98, Be Stars, p. 261  
 Nicolet, B. 1978, A&AS, 34, 1

**File Information:** 5 files, 337 Kbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 3069A**

Ardeberg, A., and Virdefors, B.

**A Catalogue of Stellar Spectrophotometric Data (1980)**

**Keywords:** *spectrophotometry*

**Description:** The catalog consists of a list 378 sets of stellar energy distributions for 356 stars based on photoelectric spectrophotometry. The catalog is an extension of the Breger (1976) catalog. The Breger catalog provides good coverage for main-sequence stars in the spectral range B0-F0 and around K0, with poor coverage for the spectral types earlier than B0 and for F2-G5. Addition of data to Breger's catalog has come from eight different sources and has been transformed to the Hayes-Latham calibration of Vega. As a result good coverage is obtained for O stars as well as for F and G stars on the main-sequence. In addition, the data for late-type stars of luminosity classes IV and III are significantly strengthened as are those for early-type supergiant stars.

**References:**

- Ardeberg, A., and Virdefors, B. 1980, A&AS, 40, 307  
 Breger, M. 1976, ApJS, 32, 7

**File Information:** 1 file, 146 Kbytes      **Status:** In preparation, revision, or update

**ADC 3076**

Hardorp, J., et al.

**Luminous Stars in the Northern Milky Way (1959)**

**Keywords:** *luminous stars; Milky Way*

**Description:** The catalog contains a series of works published in the period 1959 to 1965, resulting from a joint survey of the Hamburg and Warner and Swasey Observatories for early-type stars of high luminosity. This survey was conducted using objective-prism plates taken with the Schmidt telescopes of the Hamburg, Warner and Swasey, and University of Michigan Observatories. The catalog contains all stars of the six source publications in a single file. In addition to the file containing the lists in order of their publication, a second file sorted by right ascension and a third file containing the remarks published in Volumes II, IV, and VI are included in the catalog. The first two files of the catalog include LSN identifiers, *Durchmusterung* (DM) numbers, spectral types, photographic

magnitudes, right ascension and declination (equinox B1950.0), and brief remarks. The separate remarks file is indexed by LSN identification.

**References:**

- Hardorp, J., Rohlf, K., Slettebak, A., and Stock, J. 1959, Vol. I (Hamburg-Bergedorf)  
 Stock, J., Nassau, J.J., and Stephenson, C.B. 1960, Vol. II (Hamburg-Bergedorf)  
 Hardorp, J., Theile, I., and Voigt, H.H. 1964, Vol. III (Hamburg-Bergedorf)  
 Nassau, J.J., and Stephenson, C.B. 1963, Vol. IV (Hamburg-Bergedorf)  
 Hardorp, J., Theile, I., and Voigt, H.H. 1965, Vol. V (Hamburg-Bergedorf)  
 Nassau, J.J., Stephenson, C.B., and MacConnell, D.J. 1965, Vol. VI (Hamburg-Bergedorf)

**File Information:** 4 files, 1.14 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 3077**

Snow Jr., T.P., and Jenkins, E.B.

**A Catalog of 0.2-Å Resolution Far-Ultraviolet Stellar Spectra Measured with Copernicus (1977)**

**Keywords:** *spectrophotometry; ultraviolet spectra*

**Description:** The catalog is a subset comprising data for 60 O- and B-type stars observed by COPERNICUS. Each spectrum has 151 logical records and 2250 data points. The first data point for each star begins at 1000 Å and the points step in 0.2 Å intervals to 1450 Å. Record 1 contains the object identification in the first 16 bytes. Records 2-151 contain the spectral data, 15 data points per record. Each data point is of the form Average Corrected Signal/Number of Observations.

**Reference:**

Snow Jr., T.P., and Jenkins, E.B. 1977, *ApJS*, **33**, 269

**File Information:** 2 files, 1.06 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Full documentation available

**ADC 3078**

Morris-Kennedy, P.

**MK Classification Extension (1983)**

**Keywords:** *MK spectral classification; spectral types*

**Description:** The catalog provides classifications on the Morgan-Keenan (MK) system published in the literature since the appearance of the La Plata catalog (Jaschek et al. 1964). In addition to the MK types, the catalog contains, for REFERENCE PURPOSES ONLY, UVB photometry,

some component identifications for multiple systems, and miscellaneous remarks, e.g., cluster membership, although this information is not professed to be complete. A second file of the machine version contains the bibliographical references cited in the data file and indicates classifications done by objective-prism techniques (OP).

**References:**

Morris-Kennedy, P. 1983, Mt. Stromlo Obs.

Jaschek, C., Conde, H., and de Sierra, A.C. 1964, Publ. La Plata Obs., Ser. Astron., 28(2)

**File Information:** 3 files, 2.82 Mbytes      **Status:** Has been checked for consistency  
 Available in microfiche version  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 3079A**

Applequist, L., et al.

**A Photometric Atlas of the Spectrum of Gamma Tauri 5186-8700 Å (1983)**

**Keywords:** *spectrophotometry; K-type stars; giant stars*

**Description:** The atlas lists wavelength and normalized intensity at 22725 points in the range 5186-8700 Å of the spectrum of  $\gamma$  Tauri. The atlas is based on spectrograms of dispersion 4.9 Å/mm obtained with the 1.2-m telescope and coude spectrograph of the Dominion Astrophysical Observatory.

**Reference:**

Applequist, L., Andersen, J., Fisher, W.A., Fletcher, J.M., and Kjaergaard, P. 1983, *A&AS*, 52, 237

**File Information:** 10 files, 6.26 Mbytes      **Status:** Has been checked for consistency  
 Documentation in hard copy form only  
 Available via network

**ADC 3080**

Houk, N.

**Michigan Catalogue of 2-Dimensional Spectral Types for the HD Stars, Vol. 3 (1982)**

**Keywords:** *MK spectral classification; spectral types*

**Description:** The catalog contains spectral types for the *HD* stars from declinations  $-40^\circ$  to  $-26^\circ$ . The stars were classified visually by N. Houk on objective-prism plates taken at a dispersion of 108 Å/mm with a resolution of about 2 Å/mm. The only difference in form between this volume and Volume 2 is that *Smithsonian Astrophysical Observatory Star Catalog (SAO)* numbers are given instead of *Cape Photographic Durchmusterung (CPD)* numbers. The catalog also includes photo-

graphic magnitudes, right ascension and declination (B1900.0), precession, galactic coordinates, and cross identifications to the numbering systems of the *Córdoba Durchmusterung* and *SAO*.

**Reference:**

Houk, N. 1982, U. Michigan

**File Information:** 3 files, 4.91 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 3083**

Heck, A., et al.

IUE Low-Dispersion Spectra Reference Atlas. I. Normal Stars (1984)

**Keywords:** *spectrophotometry; ultraviolet spectra*

**Description:** The atlas contains the fluxes ( $2 \text{ \AA}/\text{step}$ ) of 229 low-dispersion stellar spectra collected by the International Ultraviolet Explorer (IUE) satellite, compiled for the purpose of establishing reference spectral sequences in the ultraviolet range. The sequences have been constructed and the standard stars selected directly from the ultraviolet material, staying as far as possible within the general MK frame. The catalog is essentially composed of stars exhibiting normal behavior in the ultraviolet. A few peculiar objects have, however, been included as an illustration of typical abnormalities. This work clearly pointed out the dangers of extrapolating a spectral classification based on a given wavelength range to another one, and, in particular, of using the MK spectral type alone outside its definition range. The atlas consists of 206 records per object. For each object the first record gives the identification of the star (*HD* number when available; if not, *DM* number) and a value recommended as the maximum flux scale for a graphic representation of the spectrum. Record numbers 2 to 206 contain the absolute fluxes for the interval 1150-3200  $\text{\AA}$ .

**Reference:**

Heck, A., Egret, D., Jaschek, M., and Jaschek, C. 1984, ESA SP-1052

**File Information:** 2 files, 4.50 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM

**ADC 3084B**

Cruz-González, C., et al.

Catalogue of Galactic O Stars (1974)

**Keywords:** *O stars*

**Description:** The catalog is a compilation of published data for 644 galactic O stars of luminosity V. The catalog is intended to be useful to O-type star observers by providing a reference list for general studies on O-type stars. The catalog includes cross identifications, equatorial and galactic

coordinates, visual or photographic magnitudes, B-V, spectral types, distances to the stars, radial velocities, H II region identifications, remarks, and notes.

**Reference:**

Cruz-González, C., Recillas-Cruz, E., Costero, R., Peimbert, M., and Torres-Peimbert, S. 1974, *Rev. Mex. Astron. Astrof.* 1, 211

**File Information:** 2 files, 105 Kbytes      **Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 3085**

van der Hucht, K.A., et al.

**Sixth Catalogue of Galactic Wolf-Rayet Stars (1981)**

**Keywords:** *Wolf-Rayet stars; planetary nebulae*

**Description:** This data set consists of three files that reproduce data from three tables in the reference. The first file is a catalog of 159 Population I Galactic Wolf-Rayet Stars. The catalog includes a cross index between a running entry number, the best known or earliest catalog reference, *HD*, *BD/CPD*, *CD*, and *LS*. Each star also has an equatorial (1950.0) and galactic positions, precession to 2000.0, spectral type, binary information (if it applies), narrow-band v and b photometry, and reference codes for all of the previous data. The second file is a catalog of 45 Central Stars of Planetary Nebulae of Type [WR], [WR-Of], [O VI], [WC 10], and [WC 11]. The catalog contains a running entry number and identifications for the planetary nebula in which the star is located. Each star also has an equatorial (1950.0) and galactic positions, spectral type, visual magnitude, reference codes for each of the previous data, and an index for additional references that are in the third file.

**Reference:**

van der Hucht, K.A., Conti, P.S., Lundström, I., and Stenholm, B. 1981, *Space Science Rev.* 28, 227

**File Information:** 3 files, 87.5 Kbytes      **Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 3086**

Henize, K.G., et al.

**Catalog of Far-Ultraviolet Objective-Prism Spectrophotometry: Skylab Experiment S-019, Ultraviolet Stellar Astronomy (1979)**

**Keywords:** *spectrophotometry; ultraviolet spectra*

**Description:** The catalog contains arrays of ultraviolet flux measurements at wavelengths of 1300-4200 Å. The data were obtained with an objective-prism telescope (an f/3 Ritchey-Chrétien system

with a 15-cm aperture and a calcium fluoride-lithium fluoride focal-plane corrector). The spectra were digitized with a PDS 1010A microdensitometer, and each spectrum was scanned in a series of 30- $\mu$  strips. The catalog also includes exposure data, intermediate-band magnitudes, and cross identifications to the numbering system of *The Henry Draper Catalogue*.

**Reference:**

Henize, K.G., Wray, J.D., Parsons, S.B., and Benedict, G.F. 1979, NASA Ref. Publ. 1031

**File Information:** 2 files, 2.57 Mbytes      **Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 3088**

Gunn, J.E., and Stryker, L.L.

**Stellar Spectrophotometric Atlas 3130-10800 Å (1983)**

**Keywords:** *spectrophotometry*

**Description:** The atlas contains normalized spectral energy distributions, computed colors, and scan line and continuum indices for 175 selected stars covering *BD*, the complete range of spectral type, and luminosity class. The data were obtained with the five-meter Hale telescope using the Oke multichannel scanner, and were taken for purposes of synthesizing galaxy spectra. The data for each star are contained in a group of logical records, identical in format with other groups of records for other stars. Record 1 contains the star identification, filter used, date of run, V magnitude, and visual absorption,  $A_V$ , while record 2 gives UBV colors, airmass, and coordinates of the star. The scanner data are given in records 3-142, which also contain miscellaneous information in the final records. The wavelength-increment is 10 Å from 3130-5740 Å and increases to 20 Å in the range 5760-10680 Å.

**Reference:**

Gunn, J.E., and Stryker, L.L. 1983, *ApJS*, 52, 121

**File Information:** 2 files, 1.93 Mbytes      **Status:** Has been checked for consistency  
Available via network  
Available on CD-ROM  
Full documentation available

**ADC 3089**

Adelman, S.J., et al.

**A Catalog of Stellar Spectrophotometry (1989)**

**Keywords:** *spectrophotometry*

**Description:** The catalog is a collection of spectrophotometric measurements obtained with rotating grating scanners attached to various telescopes at the Kitt Peak National, Mount Wilson, and Palomar Observatories. The observations were made during the 1970s and early 1980s, both individually and jointly, by S.J. Adelman, D.M. Pyper, S.N. Shore, and R.E. White. All measurements

were calibrated with the fluxes of Alpha Lyrae (Vega). Each observation is preceded by a set of two header records giving object identifications and other information. The observations are presented as data pairs with wavelength in angstrom and the normalized magnitude at that wavelength. The number of data pairs in a spectrum varies depending on the instrument used and the wavelength range.

**Reference:**

Adelman, S.J., Pyper, D.M., Shore, S.N., White, R.E., and Warren Jr., W.H. 1989, *A&AS*, 81, 221

**File Information:** 5 files, 730 Kbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 3090**

Boyarchuk, A.A., and Kopylov, I.M.

**Rotational Velocities (1964)**

**Keywords:** *rotational velocities*

**Description:** The catalog contains rotational velocities of 2558 stars on the basis of published data. All the  $v \sin i$  values are reduced to the Slettebak system. The spectral classes of 1913 stars are in the MK system and of most of the others in the *HD* system. The catalog is sufficiently complete for O5-G5 stars brighter than magnitude 5.5. The catalog also includes visual magnitudes, spectral types, star names, and cross identifications of the numbering systems of *The Henry Draper Catalogue*, *The Bright Star Catalogue*, and *Durchmusterung* catalogs.

**Reference:**

Boyarchuk, A.A., and Kopylov, I.M. 1964, *Publ. Crimean Astrophys. Obs.* 31, 44

**File Information:** 1 file, 267 Kbytes      **Status:** Has been checked for consistency  
 Available in microform versions  
 Documentation in hard copy form only  
 Available via network

**ADC 3092**

Jacoby, G.H., Hunter, D.A., and Christian, C.A.

**A Library of Stellar Spectra (1984)**

**Keywords:** *spectrophotometry*

**Description:** The machine-readable version of the library contains digital spectra of 161 stars of spectral types O through M and luminosity classes I, III, and V. Most stars are of solar metallicity, although two were chosen specifically for low metallicity. The data were obtained with the Intensified Reticon Scanner on the #1 91-cm telescope at Kitt Peak National Observatory. The scans cover the

wavelength range 3510-7427 Å, with a resolution of approximately 4.5 Å, while the typical photometric uncertainty of each resolution element is about 1% and broadband variations are <3%. The data pertaining to each star are contained in a group of 352 data records. The first two (header) records contain general information about the star, such as identification, spectral type, UBV colors and reddening, intrinsic UBV colors, and wavelength information. Records 3-352 contain 2799 flux values in groups of eight fluxes per record.

**Reference:**

Jacoby, G.H., Hunter, D.A., and Christian, C.A. 1984, *ApJS*, 56, 257

**File Information:** 2 files, 4.36 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 3095**

Gürtler, J., et al.

**The Interstellar 2200 Å Band: A Catalogue of Equivalent Widths (1982)**

**Keywords:** *equivalent widths; interstellar medium*

**Description:** The catalog presents the equivalent widths of the interstellar absorption band at 2200 Å. The two published catalogs list a total of 709 stars. The equivalent widths in the stars were derived using data given in the *Ultraviolet Bright Star Spectrophotometric Catalogue* (Jamar et al. 1976) of the *TD-1* and *The Supplement to the Ultraviolet Bright Star Spectrophotometric Catalogue (TD-1 Supplement)*. The stars in the *TD-1* and *TD-1 Supplement* were included for which  $E_{B-V}$  is greater than 0.04 magnitude. There is a satisfying agreement with spectroscopic data obtained with the OAO-2 satellite. The catalog includes *HD* number,  $E_{B-V}$  color excess, wavelengths of band centers, equivalent widths, standard deviations of widths, and remarks.

**References:**

Gürtler, J., Schielicke, R., Dorschner, J., and Friedemann, C. 1982, *Astron. Nachr.* 303, 105

Friedemann, C., Gürtler, J., Schielicke, R., and Dorschner, J. 1983, *Astron. Nachr.* 304, 237

Jamar, C., Macau-Hercot D., Monfils A., Thompson, G.I., Houziaux, L., and Wilson R. 1976, ESA SR-27

**File Information:** 1 file, 41.5 Kbytes      **Status:** Is distributed as received  
 Documentation in hard copy form only  
 Available via network

**ADC 3096A**

Cayrel de Strobel, G., et al.

**A Catalogue of [Fe/H] Determinations, 1984 Edition (1985)**

**Keywords:** *[Fe/H] abundances*

**Description:** The catalog is a compilation of [Fe/H] determinations and contains 1921 determinations for 1035 stars. The literature search is complete up to December 1983. The abundances are given in the form of logarithmic differences between the relative abundance in the atmosphere of a star and the relative iron abundance in a standard star and written in the form  $[Fe/H] = \log(Fe/H)_* - \log(Fe/H)_{standard}$ . They come exclusively from detailed analyses based on high dispersion spectra. The chosen limit of the dispersion is about 20 Å/mm. The catalog consists of six files: a description file, three data files, a dispersion file, and a reference file. The data files include identifications, spectral types, visual magnitudes, absolute magnitudes, color indices, temperature parameters, gravities, standard stars employed in this analysis, abundances (iron/hydrogen parameters), and references.

**Reference:**

Cayrel de Strobel, G., Bentalila, C., Hauck, B., and Duquennoy, A. 1985, *A&AS*, 59, 145

**File Information:** 8 files, 374 Kbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 3097A**

Mermilliod, J.C.

**Bibliography of Individual Radial Velocities for Stars in Open Clusters. II. NGC and IC Clusters (1984)**

**Keywords:** *bibliography; radial velocities; open clusters*

**Description:** The catalog is a compilation of the bibliography of individual radial velocities for stars in open clusters. The catalog contains 6504 individual velocities for 774 stars in 78 open clusters. It is devoted to NGC and IC open clusters. The collected data have been found in the literature published from 1900 to the end of 1983. It also contains unpublished data.

**Reference:**

Mermilliod, J.C. 1984, *CDS Bull.* No. 26, p. 9

**File Information:** 3 files, 517 Kbytes      **Status:** Has been checked for consistency  
 Available via network  
 Description for machine version

**ADC 3105**

Andersen, J., et al.

**Radial Velocities of Southern Stars Obtained with the Photoelectric Scanner CORAVEL. III. 790 Late-Type Bright Stars (1985)**

**Keywords:** *bright stars; radial velocities*

**Description:** The catalog contains 1595 photoelectric radial-velocity observations for 790 bright southern stars of spectral type F5 and later. One of the purposes of this project is to make a complete southern sky radial velocity coverage using the second CORAVEL photoelectric radial-velocity scanner. The first CORAVEL operating at Observatoire de Haute Provence was used to observe the stars in the Northern Hemisphere. Two CORAVEL observations per star were made with a CORAVEL photoelectric radial-velocity scanner on the Danish 1.54-m telescope at ESO, La Silla, Chile. The mean velocities are accurate to about 0.15 km/sec r.m.s. for sharp-lined constant stars, errors increasing somewhat for stars with significant rotation. The present data complete and supersede the preliminary data for 500 stars supplied in advance of publications for inclusions in the fourth edition of *The Bright Star Catalogue*. At the time this project was planned, there were still some 1500 stars in *The Bright Star Catalogue* for which no radial-velocity information was available – virtually all of them in the Southern Hemisphere. For the stars of type F5 and later, photoelectric scanning techniques can be used with much increased efficiency and accuracy. The catalog includes HD numbers with component designation for visual binary components from Jeffers et al. (1963), HR numbers, FK4 or FK4 Supplement numbers, visual magnitudes, MK spectral classes, mean velocities, E/T variability parameters, rotation classes as assigned from the measured linewidths, and remarks and information for individual measurements in a separate file.

**References:**

- Andersen, J., Nordström, B., Ardeberg, A., Benz, W., Imbert, M., Lindgre, H., Martin, N., Maurice, E., Mayor, M., and Prévot, L. 1985, *A&AS*, 59, 15  
 Jeffers, H.M., van den Bos, W.H., Greeby, F.M. 1963, *Publ. Lick Obs.*, Vol. 21

**File Information:** 3 files, 173 Kbytes      **Status:** Has been checked for consistency  
 Documentation in hard copy form only  
 Available via network

**ADC 3110**

Page, A.A.

**Catalogue, Spectrum and Magnitude Data Bank of Be, Bp and Bpe Stars (1984)**

**Keywords:** *early-type stars; Be stars; Bp stars; B-type stars; bibliography*

**Description:** This catalog consists of data that form a spectrum (mostly MK spectral type) and magnitude data base for Be, Bp, and Bpe type stars. The data covers 6118 stars listed in bibliographic references through 31 December 1984. The data are divided into two major sets; each set is indexed by stellar identification. The first contains cross references to 14 major catalogs and to individual bibliographic references. The second contains the spectral type; V, B, and photographic magnitudes; and B-V. All data in the second file have references to the original data source. The references for these two data sets are listed in a third data set. This catalog is an update of the 31 December 1980 version.

**Reference:**

- Page, A.A. 1984, *Mt. Tamborine Obs.*

**File Information:** 3 files, 3.39 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Description for machine version

**ADC 3111**

Rousseau, J., et al.

**Studies of the Large Magellanic Cloud Stellar Content III. Spectral Types and V  
 Magnitudes of 1822 Members (1978)**

**Keywords:** *Magellanic Clouds; stellar distribution*

**Description:** The catalog is a survey of more than 1800 supergiants in the Large Magellanic Cloud. A spectral survey was made during the period 1971 to 1975 with the European Southern Observatory (ESO) 40-cm astrograph at La Silla, Chile. It is equipped with its normal prism, giving an intermediate dispersion of 95 Å/mm at wavelength 4026 Å. Long-exposure plates taken directly or with an interference filter enabled spectral classification for nearly 1600 stars. In parallel, a V photographic survey spectral classification was carried out during the same period with the same astrograph and led to the determination of V magnitudes for more than 700 stars having no previous photometric data. The catalog includes star designations, numbers on the B chart as published by Hodge and Wright (1967), right ascension and declination (B1975.0), MK spectral classifications, V photoelectric magnitudes, color indices (B-V, U-B), V photographic magnitudes, and remarks on star identifications.

**References:**

- Rousseau, J., Martin, N., Prévot, L., Rebeiro, E., Robin, A., and Brunet, J.P. 1978, *A&AS*, 31, 243  
 Hodge, P.W., and Wright, F. W. 1967, *The Large Magellanic Cloud*, Smithsonian Publication 4699 (Washington: Smithsonian Press)

**File Information:** 1 file, 199 Kbytes      **Status:** Is distributed as received  
 Documentation in hard copy form only  
 Available via network

**ADC 3112**

Bartaya, R.A.

**Catalogue of Spectral and Luminosity Classes of 10395 Stars in Kapteyn Areas  
 NN 2 - 43 (1979)**

**Keywords:** *selected areas; spectral types*

**Description:** The catalog is a compilation of the spectral data for 10395 stars in Kapteyn Areas NN 2-43, obtained with the 70-cm meniscus telescope of the Abastumani Astrophysical Observatory. The 8° objective prism was used with a dispersion of 166 Å/mm near H-γ. The catalog data for all Kapteyn Areas are uniform not only in the sense of classification accuracy (The whole classification is done by the author of the catalog.) but also in the sense of penetration; the areas were

photographed both on Kodak IIA-O and ORWO ZP-3 plates with the same maximal exposure for each plate, and they cover the equal areas of  $4.5^\circ \times 4.5^\circ$ . The errors of the determinations are  $\pm 0.6$  for a spectral subclass and  $\pm 0.5$  for luminosity class. The catalog includes comments, star numbers, *BD*, *HD* numbers, coordinates (B1950.0), photographic magnitudes, spectral and luminosity classes, and other identifications.

**Reference:**

Bartaya, R.A. 1979, *Bull. Abastumani Astrophys. Obs.* No. 51

**File Information:** 2 files, 1.10 Mbytes      **Status:** Is distributed as received  
Documentation in hard copy form only  
Available via network

**ADC 3113**

Sanduleak, N.

**A Deep Objective-Prism Survey for Large Magellanic Cloud Members (1969)**

**Keywords:** *surveys; Magellanic Clouds*

**Description:** The catalog contains 1273 proven or probable Large Magellanic Cloud (LMC) members, identified on plates taken with the Curtis-Schmidt telescope at Cerro Tololo Inter-American Observatory in Chile. The stars are generally brighter than photographic magnitude 14 and are identified on charts published by Hodge and Wright (1967) and reproduced in the source publication (Sanduleak 1969). Approximate spectral types were determined by examination of the 580 Å/mm (at H- $\gamma$ ) objective-prism spectra; approximate 1975 positions were obtained by measuring relative to the 1975 coordinate grids on the *Uppsala-Mount Stromlo Atlas of the LMC* (Gascoigne and Westerlund 1961), and approximate photographic magnitudes were determined by averaging image density measures from the plates and image-diameter measures on the "B" charts of Hodge and Wright (1967). The catalog includes an identification number (NS), *HDE* number, *Cape Photographic Durchmusterung* number, right ascension and declination (equinox B1975), spectral type, photographic magnitude, and alternate identifications. The machine version, updated in September 1986, includes corrections supplied by the author in 1985; thus, it differs somewhat from the published version.

**References:**

Sanduleak, N. 1969, *Contr. Cerro Tololo Inter-American Obs.*, No. 89

Gascoigne, S.C.B., and Westerlund, B.E. 1961, *Uppsala-Mount Stromlo Atlas of the Magellanic Clouds* (Canberra: Australian National University)

Hodge, P.W., and Wright, F.W. 1967, *The Large Magellanic Cloud*, Smithsonian Publication 4699 (Washington: Smithsonian Press)

**File Information:** 1 file, 114 Kbytes      **Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 3114**

Kleinmann, S.G., and Hall, D.N.B.

**Spectra of Late-Type Standard Stars in the Region 2.0-2.5  $\mu$  (1986)****Keywords:** *late-type stars; standard stars; spectrophotometry; infrared spectra*

**Description:** This catalog contains a collection of K-band spectra for 26 stars with near-solar abundances, ranging in spectral class from F8 to M7 and in luminosity from dwarfs to supergiants. The spectra cover the wavelength region from 4150 to 4950  $cm^{-1}$  and generally exhibit a signal to noise ratio above 400. Five stars here are supergiants, 15 are giants, and six are dwarfs. Data include observation date, starting wavenumber, wavenumber increment, scale factor of relative intensity, and offset of relative intensity.

**Reference:**Kleinmann, S.G., and Hall, D.N.B. 1986, *ApJS*, **62**, 501**File Information:** 1 file, 1.63 Mbytes

**Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 3116**

Massey, P., et al.

**Spectrophotometric Standards (1988)****Keywords:** *spectrophotometry; standard stars*

**Description:** The atlas contains spectrophotometry for 25 stars intended to be used as standards. The wavelength coverage is from 3200-8100 Å, and the magnitudes are on the Hayes-Latham system. The data were collected on 25 nights with the Intensified Reticon Scanner (IRS) on the No. 2 0.9-m telescope and eight nights with the Intensified Image Dissector Scanner (IIDS) on the 2.1-m telescope at the Kitt Peak National Observatory between March 1985 and June 1987. On the average, the night-to-night photometric precision of the data is better than 0.01 magnitude. The external agreement with stars in common with Stone (1977) is typically better than 3% within 50 Å band passes. The hottest stars were selected as these had the weakest and fewest lines as well as plenty of UV flux; e.g., stars of type O, sdO, and weak-lined white dwarfs. The catalog includes the magnitudes of 25 stars using the Stone (1977) band passes centered at the Hayes (1970) calibration wavelengths, and the magnitudes using 50 Å band passes centered every 50 Å.

**Reference:**Massey, P., Strobel, K., Barnes, J.V., and Anderson, E.R. 1988, *ApJ*, **328**, 315**File Information:** 4 files, 499 Kbytes

**Status:** Has been checked for consistency  
Available via network  
Available on CD-ROM  
Full documentation available

**ADC 3127**

Andersen, J., and Nordström, B.

**Radial Velocities of Bright Southern Stars. I, II, IV (1983)****Keywords:** *radial velocities; bright stars*

**Description:** The catalog contains the results of an effort to determine radial velocities for those southern stars in *The Bright Star Catalogue* with no previously published radial velocity. This version of the catalog combines three lists of data published separately during 1983-1985, the first for B-type stars, the second for late-type stars, and the last for A and F type stars. The catalog lists identifications, spectral types, radial velocity data, rotation classes, notes, and individual observations used in calculating the radial velocities for 743 southern stars.

**References:**Andersen, J., and Nordström, B. 1983, *A&AS*, 52, 471Andersen, J., and Nordström, B. 1983, *A&AS*, 52, 479Nordström, B., and Andersen, J. 1985, *A&AS*, 61, 53**File Information:** 3 files, 314 Kbytes**Status:** Has been checked for consistency

Documentation in hard copy form only

Available via network

**ADC 3129**

McCook, G.P., and Sion, E.M.

**A Catalog of Spectroscopically Identified White Dwarfs, 3rd Edition (1987)****Keywords:** *white dwarf stars*

**Description:** The catalog is a compilation of 1279 white dwarfs that have been identified spectroscopically up to January 1987. It is the third edition of the *Villanova Catalog of Spectroscopically Identified White Dwarfs*. Although the third edition does not incorporate a large number of newly discovered stars, quite a few revisions, corrections, and some additions have been made. The catalog contains cross identifications, equatorial coordinates (equinox and equator B1950), spectral types, magnitudes of various bandpasses, absolute visual magnitudes, proper motions, radial velocities, and trigonometric parallaxes, and references.

**Reference:**McCook, G.P., and Sion, E.M. 1987, *ApJS*, 65, 603**File Information:** 8 files, 702 Kbytes**Status:** Has been checked for consistency

Available via network

Available on CD-ROM

Full documentation available

**ADC 3134**

Andersen, J., and Nordström, B.

**Radial Velocities of Bright Southern Stars. V. 146 Population II F Stars and Related Objects (1985)****Keywords:** *radial velocities; F-type stars; population II stars*

**Description:** This catalog presents new radial velocity determinations, based on 20 Å/mm coude plates, for 146 southern stars brighter than  $m_v = 8.3$ . Drawn from the catalog of uvby- $\beta$  photometry of southern A5-G0 stars by Olsen (1983), the program stars are certain or suspected Population II stars. One triple-lined and ten double-lined binaries have been detected, including HD 210737, for which a preliminary orbit has been derived. Notes on spectral peculiarities are given.

**References:**Andersen, J., and Nordström, B. 1985, *A&AS*, **62**, 355-363Olsen, E.H. 1983, *A&AS*, 55**File Information:** 2 files, 14.9 Kbytes

**Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 3135**

Cannon, A.J., and Pickering, E.C.

**Henry Draper Catalogue and Extension 1 (HD, HDE) (1918-1924)****Keywords:** *spectral types; surveys*

**Description:** An updated, corrected, and extended machine-readable version of *The Henry Draper Catalogue (HD)* (Cannon & Pickering 1918-1924) is available with documentation from the Astronomical Data Center as of April 1989. Published and unpublished errors discovered in the previous version have been corrected; letters indicating supplemental stars in the *BD* have been moved to a new byte to distinguish them from double-star components; and the machine-readable portion of *The Henry Draper Extension (HDE)* (HA 100; Cannon 1925-1936) has been converted to the same format as the main catalog with additional data added as necessary. The catalog lists HD numbers, Durchmusterung numbers, positions for equinox B1900, photovisual and photographic magnitudes, spectral types, codes for the intensity of the spectra used, and remarks.

**References:**Cannon, A.J., and Pickering, E.C. 1918-1924, *Harv. Ann.* **91-99**Cannon, A.J. 1924-1936, *Harv. Ann.* **100** (HDE1)Cannon, A.J. 1925-1936, *The Henry Draper Extension*, *Ann. Astron. Obs. Harvard College*, 100Cannon, A.J., and Pickering, E.C. 1918-1924, *The Henry Draper Catalogue*, *Ann. Astron. Obs. Harvard College*, 91-99

**File Information:** 2 files, 12.0 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 3136**

Torres, A.V., and Massey, P.

**An Atlas of Optical Spectrophotometry of Wolf-Rayet Carbon and Oxygen Stars  
 (1987)**

**Keywords:** *spectrophotometry; Wolf-Rayet stars*

**Description:** The catalog contains a homogeneous set of optical spectrophotometric observations (3300-7300 Å) at moderate resolution (about 10 Å) of 86 Wolf-Rayet carbon and oxygen stars in this Galaxy, the Large Magellanic Cloud, and the Small Magellanic Cloud. The observations were made with the Intensified Reticon Scanner on the white spectrograph of the 0.9 m telescope at Kitt Peak and with the SIT-Vidicon detector on the Cassegrain spectrograph of the 1.5-m telescope at Cerro Tololo Inter-American Observatory. A header record for each set of spectrophotometric data contains identification(s), type, instrument, number of data points, and comments. Following each header, data records contain the wavelength, flux, and magnitude for five data points.

**Reference:**

Torres, A.V., and Massey, P. 1987, *ApJS*, **65**, 459

**File Information:** 1 file, 2.88 Mbytes      **Status:** Has been checked for consistency  
 Documentation in hard copy form only  
 Available via network

**ADC 3139A**

Luck, R.E.

**A Compendium of Equivalent Width Measures (1990)**

**Keywords:** *equivalent widths*

**Description:** The files in this data set contain equivalent width measures made in the course of a number of published studies for four types of objects: mid-to-late supergiants, metal-deficient red giants, subgiant CH stars, and G/K giants. The files include lower excitation potentials and gf values. There is a description file containing references to the published analyses, lists of stars analyzed, and format descriptions in Fortran style. There is also a file with a program to read the data.

**Reference:**

Luck, R.E. 1990, Case Western Reserve Univ.

**File Information:** 16 files, 1.83 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Description for machine version

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**ADC 3143**

Torres-Dodgen, A.V., and Massey, P.

**Spectrophotometry of Wolf-Rayet Stars (1988)****Keywords:** *spectrophotometry; Wolf-Rayet stars*

**Description:** The catalog contains spectrophotometry at approximately 10 Å resolution for 174 southern Wolf-Rayet stars. All observations were made at the Cerro Tololo Inter-American Observatory between November 1981 and February 1985. The catalog includes star identifications and fluxes in the range 3400-7300 Å for most known Wolf-Rayet stars in the Large Magellanic Cloud and in the range 3400-4700 Å for all known Wolf-Rayet stars in the Small Magellanic Cloud.

**Reference:**Torres-Dodgen, A.V., and Massey, P. 1988, *AJ*, 96, 1076**File Information:** 1 file, 2.49 Mbytes**Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

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**ADC 3144**

Fouts, G., and Sandage, A.

**New Subdwarfs. V. Radial Velocities for 889 High-Proper-Motion Stars  
Measured with the Mount Wilson 100-Inch Reflector (1986)****Keywords:** *radial velocities; subdwarf stars*

**Description:** This catalog provides UBV photometry, proper motions, and radial velocities for 889 high-proper-motion stars that were selected from the subdwarf candidate list of Sandage and Kowal (1986). The primary data are the radial velocities, the UBV, and proper-motion data having been taken from Sandage and Kowal (1986) and the Lowell and Luyten catalogs, respectively. The radial velocities were determined from 2265 measurements made with the Mount Wilson 2.5-meter telescope coude spectrograph equipped with a Reticon detector. The authors state that the internal error of a single measure was determined to be 4.7 km/s, while 88 stars in common with previously known subdwarfs having RV data gave an external error of 6.9 km/s per measure. There are 38 stars in the catalog having line-of-sight velocities >200 km/s (absolute value) of which 22 are new. The catalog includes star designation, equatorial coordinates (B1950.0), galactic coordinates, UBV photometry, proper motions (in both equatorial and galactic coordinates), parallactic angle, radial (line-of-sight) velocity, and number of RV observations.

**References:**Fouts, G., and Sandage, A. 1986, *AJ*, 91, 1189Sandage, A., and Kowal, C. 1986, *AJ*, 91, 1140

**File Information:** 1 file, 85.7 Kbytes      **Status:** Has been checked for consistency  
 Documentation in hard copy form only  
 Available via network

**ADC 3150**

Keenan, P.C., and McNeil, R.C.

**The Perkins Catalog of Revised MK Types for the Cooler Stars (1989)**

**Keywords:** *MK spectral classification; spectral types; late-type stars; standard stars*

**Description:** The catalog contains standard stars of spectral types G0 and later (G, K, M, and a few S stars) classified on the Revised MK system at the Perkins Observatory. The revised MK system is described by Keenan (1987), and the present list is an expansion of and supersedes one published by Keenan and Yorke (1988). The spectrograms used for the classification were taken at four different observatories; hence, extensive comparisons have been made to ensure consistency between the Northern and Southern Hemispheres. The list provides a consistent set of standards in most parts of the sky and over a considerable range in magnitude. Omitted are stars of spectral types R and N, Mira variables, and stars of other groups (e.g., BY Dra variables) having spectra that are composite or so peculiar that they are not satisfactorily classified on the present system. The catalog includes star names (including Bayer and Flamsteed designations), numbers from *The Bright Star Catalogue*, HD numbers, photoelectric V magnitudes, and spectral types.

**References:**

- Keenan, P.C., and McNeil, R.C. 1989, *ApJS*, 71, 245  
 Keenan, P.C. 1987, *PASP*, 99, 713  
 Keenan, P.C., and Yorke, S.B. 1988, *Bull. Inform. CDS* No. 35, p. 37

**File Information:** 3 files, 143 Kbytes      **Status:** Has been checked for consistency  
 Available via network  
 Description for machine version

**ADC 3153**

Arnaud, K.A., Gilmore, G., and Collier Cameron, A.

**An Atlas of Stellar Spectra between 2.00 and 2.45 micrometers (1989)**

**Keywords:** *infrared spectra; spectrophotometry*

**Description:** The atlas represents a collection of spectra in wavelength range 2.00  $\mu$  to 2.45  $\mu$  having resolution of approximately 0.02  $\mu$ , for a sample of 73 stars. These stars include supergiants, giants, dwarfs, and subdwarfs and have a range in chemical abundance from about -2 to +0.5 dex. A majority of the spectra were obtained with the UK Infrared Telescope, while some observations were collected with the Mount Hopkins Multiple-Mirror Telescope.

**Reference:**

- Arnaud, K.A., Gilmore, G., and Collier Cameron, A. 1989, *MNRAS*, 237, 495

**File Information:** 1 file, 85.6 Kbytes

**Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

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**ADC 3155**

Cannon, A.J., and Walton Mayall, M.

**The Second Henry Draper Extension: Spectral Types and Precise Positions for  
10639 Stars (1949)**

**Keywords:** *positional data; spectral types; surveys*

**Description:** This catalog presents spectral, brightness, and position data for about 10000 stars of the approximately 87000 stars in *The Second Henry Draper Extension*. This extension had previously been published only as hand-marked finding charts. The mean position error is about 0.3". Magnitudes are accurate to about 0.3 mag. Proper motions are given for about 2500 stars. These motions typically have rms errors < 0.5"/century.

**References:**

Cannon, A.J., and Walton Mayall, M. 1949, *Harv. Ann.*, 12

Röser, S., Bastian, U., and Wiese, K. 1991, *A&AS*, 88, 277

**File Information:** 3 files, 867 Kbytes

**Status:** Has been checked for consistency  
Available via network  
Description for machine version

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**ADC 3156**

Stephenson, C.B.

**A General Catalog of Cool Galactic Carbon Stars, 2nd edition (1989)**

**Keywords:** *carbon stars*

**Description:** The catalog is intended to list all cool carbon stars having known positions of at least roughly the precision of *The Henry Draper Catalogue*. Cool carbon stars are defined as stars whose spectra at low dispersion (foreexample, a resolution no better than 1-2 Å) are known to show bands of the Swan system of the C<sub>2</sub> molecule; or if the spectral region of the Swan system is inadequately observed, they show the red or infrared bands of CN in strength adequate to infer that the Swan bands almost certainly would be seen if their presence could be tested. The closing date for literature search was 30 June 1989, defined by literature received in the author's library by that date. The catalog includes equatorial coordinates (B1900.0); photographic, visual, and infrared magnitudes; spectral types, galactic coordinates, and cross indentifications to various other designation systems.

**Reference:**

Stephenson, C.B. 1989, *Publ. Warner and Swasey Obs.*, 3, No. 2

**File Information:** 6 files, 1.00 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Description for machine version

**ADC 3157**

Kinney, A.L., et al.

**An Ultraviolet Atlas of Quasar and Blazar Spectra (1991)**

**Keywords:** *atlases; Seyfert galaxies; QSOs; ultraviolet spectra*

**Description:** This atlas contains the ultraviolet spectra of 69 quasars, blazars, and Seyfert 1 galaxies that were produced by combining over 100 low resolution spectra from the International Ultraviolet Explorer (IUE) data archive. The spectra have been extracted with an optimal algorithm (see Kinney et al. 1991) and co-added to produce spectra with the best possible signal-to-noise ratio. Two copies of the spectral data are available. One file (UVATLAS.DAT) consists of a simple boxcar extraction, and the second file (ATLASOPT.DAT) contains the optimally extracted data. Each co-added spectra consists of the wavelength, quality flag, gross flux, background flux, gross flux divided by time, absolutely calibrated net flux, exposure time, and sigma. A third file (OBJECTS.DAT) is also available, which contains information from Table 1: IAU and alternate designations, redshift ( $z$ ), V magnitude, object type,  $E_{B-V}$ , galactic longitude and latitude, and number of spectra. A fourth file (DESCRIP.DAT) is also available containing a brief description of the file formats.

**References:**

Kinney, A.L., Bohlin, R.C., Blades, J.C., and York, D.G. 1991, *ApJS*, 75, 645  
 Kinney, A.L., Bohlin, R.C., and Neill, J.D. 1991, *PASP*, 103, 665

**File Information:** 4 files, 16.3 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Description for machine version

**ADC 3158**

Wu, C.-C., et al.

**IUE Ultraviolet Spectral Atlas (1991)**

**Keywords:** *ultraviolet spectra; spectrophotometry*

**Description:** The atlas contains 686 spectra of 315 standard stars obtained by the International Ultraviolet Explorer (IUE) observatory before March 1989. Observations were made with the short wavelength prime (SWP) and long wavelength prime (LWP) and redundant (LWR) cameras on board the IUE. In low dispersion mode the SWP camera covers the spectral region 1150-1975 Å with a resolution of about 6 Å, while the LWP and LWR cameras cover the 1975-3200 Å region with a resolution of about 7 Å. All spectra were processed or reprocessed by the Goddard IUE Observatory staff with the IUESIPS production software in use on the dates of processing. The atlas includes star identifications, adopted spectral types, V, B-V,  $E_{B-V}$ , IUE image numbers, apertures used for exposure, exposure times, temperatures of the camera head amplifier during the exposure, maximum

exposure levels expressed in the unit of data number (DN), and comments.

**Reference:**

Wu, C.-C., Crenshaw, D.M., Blackwell Jr., J.H., Wilson-Diaz, D., Schiffer III, F.H., Burstein, D., Fanelli, M.N., and O'Connell, R.W. 1991, IUE NASA Newsl. No. 43

**File Information:** 4 files, 16.3 Mbytes      **Status:** Has been checked for consistency

**ADC 3161**

Barbier-Brossat, M.

**Catalogue de Vitesses Radiales Moyennes Stellaires (1989)**

**Keywords:** *radial velocities*

**Description:** This catalog contains means of measurements of radial velocities of galactic stars. The data supplement the catalogs of Wilson (1953) and Evans (1978) with observations published through December 1980. There are new mean velocities for 6451 stars with new radial velocity data. More than 4500 of these stars are not in the earlier catalogs. A weighting scheme was used to form the mean velocities with data from cross-correlation spectrometers given highest weight and low dispersion ( $<100 \text{ \AA/mm}$ ) spectra given lowest weight. No systematic zero-point corrections were made but observations were taken from the literature only if they were standardized to the IAU or Wilson (1953) systems.

**References:**

Barbier-Brossat, M. 1989, *A&AS* 80, 67

Evans, D.S., 1978, General Catalog of Stellar Radial Velocities (unpublished)

Wilson, R.E., 1953, General Catalog of Stellar Radial Velocities, Carnegie Institution of Washington, Pub. 601, Washington, D.C.

**File Information:** 3 files, 780 Kbytes      **Status:** Has been checked for consistency  
Available via network  
Description for machine version

**ADC 3166**

Silva, D.R., and Cornell, M.E.

**A New Library of Stellar Optical Spectra (1992)**

**Keywords:** *spectrophotometry*

**Description:** This data set is a collection of digital optical spectra for 72 stellar types. The wavelength range is 3510-8930  $\text{\AA}$  with a resolution of 11  $\text{\AA}$ . Spectral types range from O through M while luminosity classes range from I through V. Most spectra represent stars with solar metal abundances, but some spectra from metal-rich and metal-poor are also included. Stars with temperatures, gravities, and abundances derived from high dispersion analyses were the primary candidates for inclusion. Interstellar reddening corrections were made, but absolute flux calibrations were not

attempted. Strong telluric lines were zeroed out.

**Reference:**

Silva, D.R., and Cornell, M.E. 1992, *ApJS*, 81, 865

**File Information:** 4 files, 653 Kbytes      **Status:** Has been checked for consistency  
Available via network  
Full documentation available

**ADC 3167**

Kinney, A.L., et al.

**An Atlas of Ultraviolet Spectra of Starforming Galaxies (1993)**

**Keywords:** *atlases; IR galaxies; Markarian galaxies; nearby galaxies; optical galaxies; radio galaxies; Seyfert galaxies; spectra of galaxies; UV-excess galaxies; galaxy catalogs*

**Description:** This atlas contains the ultraviolet spectra of the central regions of 143 spiral, irregular, blue compact, Seyfert 2, and starburst galaxies, which were produced by combining 387 low resolution spectra from the International Ultraviolet Explorer (IUE) data archive. The spectra have been extracted with an optimal algorithm and co-added to produce spectra with the best possible signal-to-noise ratio. The holdings for this catalog include three files: one file contains the atlas spectral data in ASCII format (13.9 Mb) and two files (ASCII [20.9 Kb] and T<sub>E</sub>Xformat) contain Table 1 from Kinney et al. (1993). Table 1 lists summary information, about each galaxy including the figure number, galaxy name, morphological type, activity class, recession velocity, apparent magnitude, absolute magnitude,  $E_{H-V}$ , galactic longitude and latitude, right ascension, declination and other names. For each galaxy the atlas spectral data file contains the following columns: wavelength, IUE quality flag (Epsilon), gross flux, background flux, net flux divided by exposure time, absolute calibrated net flux, exposure time, and sigma.

**Reference:**

Kinney, A.L., Bohlin, R.C., Calzetti, D., Panagia, N., and Wyse, R.F.G. 1993, *ApJS*, 86, 5

**File Information:** 6 files, 8.87 Mbytes      **Status:** Has been checked for consistency  
Available via network  
Full documentation available

**ADC 3169**

Griffin, R.E.

**Photometric Atlas of the Spectrum of Procyon (1979)**

**Keywords:** *atlases; spectrophotometry; F-type stars; standard stars*

**Description:** The atlas covers the spectrum of Procyon from 3140-7470 Å. Intensities are given at 5mÅ intervals. In parts of the spectrum in which there are many good lines, the wavelength scale should be good to about 3mÅ. The intensities have been normalized to the continuum, which has

been drawn by eye on the raw intensity tracings at a level of 100. The width of the hydrogen and of the H and K lines present the problem of large wavelength stretches to be bridged. In the region in which the high level Balmer lines overlap and in the regions in which there are many ozone bands, the continuum was drawn through the local high points. The accuracy of the intensities appears to be about 3%.

**Reference:**

Griffin, R.E. 1979, University of Cambridge

**File Information:** 6 files, 8.87 Mbytes      **Status:** Has been checked for consistency  
Full documentation available

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## 3.4 Cross Identifications

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ADC 4012

Roman, N.G., Warren Jr., W.H., and Schofield Jr., N.J.

### SAO-HD-GC-DM Cross Index (1983)

**Keywords:** *cross identifications*

**Description:** The catalog is an updated, corrected, and extended version of a table of correspondences originally prepared by Morin (1973). The individual data corrections, additions, and changes included in the new version number 11398, with 8600 data records having at least one change. In addition to the correction of all errors found since preparation of the original catalog, most of which resulted from misidentifications and omissions of components in multiple-star systems and missing *Durchmusterung* numbers (the common identifier) in the SAO catalog, component identifications from the *Index Catalogue of Visual Double Stars (IDS)* have been appended to all multiple SAO stars having the same DM numbers, and lowercase identifications for supplemental (footnoted) BD stars have been added. Stars deleted (duplicate entries) in the SAO catalog have been appended with a "D" and their data removed, although the records have been kept (with SAO number only) in order not to change the number of SAO stars. The data include SAO number, HD number, HD multiplicity code, GC number, DM identification code (BD, CD, CP), and number. There are fewer objects than records because of the deleted entries appended with a "D" as described above (35 stars deleted).

**References:**

Roman, N.G., Warren Jr., W.H., and Schofield Jr., N.J. 1983, *Astronomical Data Center*

Morin, D. 1973, Table of Correspondences SAO/HD/DM/GC, Obs. de Meudon, unpublished

**File Information:** 6 files, 32.7 Mbytes      **Status:** Has been checked for consistency  
 Available in microfiche version  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 4017A**

Mermilliod, J.C.

**Catalogue of HD, HDE, and DM Identifications for Stars in Open Clusters (1986)**

**Keywords:** *open clusters; cross identifications*

**Description:** The catalog is a compilation of cross-identifications between the numbering system of Mermilliod (1978) for stars in open clusters and the numbering systems of several other astronomical catalogs, including *HR*, *HD-HDE*, *DM*, *LS*, *LSS*, *GCVS*, *IDS*, *ADS*, *SAO*, and several smaller lists. Also included are files listing the inverse cross-identifications from each catalog to the Mermilliod (1978) numbers. This version updates and expands the version presented by Mermilliod (1976).

**References:**

- Mermilliod, J.C. 1986, *A&AS*, **63**, 293  
 Mermilliod, J.-C. 1976, *A&AS*, 23, 419  
 Mermilliod, J.-C. 1978, *Bull. Inform. CDS No. 14*, p. 32

**File Information:** 17 files, 1.80 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 4018**

Roman, N.G.

**WDS-DM-HD-ADS Cross Index (1987)**

**Keywords:** *cross identifications; Durchmusterungen; double and multiple stars*

**Description:** The catalog contains a cross index of 1900 positions and discoverer names, numbering systems of the *Durchmusterung (DM)* catalogs, *The Henry Draper (HD) Catalogue*, and the *New General Catalogue of Double Stars (ADS)* for stars in the 1984 machine version of the *Washington Catalog of Visual Double Stars (WDS)*. Five files are furnished so that any of these designations can be used to search the cross index. All *DM* numbers given in the notes to the WDS have been transferred to the cross index, and many additional or corrected *DM* numbers have been inserted.

**Reference:**

- Roman, N.G. 1987, *Astronomical Data Center*

**File Information:** 8 files, 9.42 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Available in hard copy form  
 Full documentation available

**ADC 4021**

Schmitz, M., Mead, J.M., and Gezari, D.Y.

**Infrared Source Cross Index (1987)****Keywords:** *infrared sources*

**Description:** The Infrared Source Cross-Index is a listing of correlated infrared source names (and positions) for astronomical objects observed at 1-1000  $\mu$ . The source names have been obtained from the data base of the first edition of the *Catalog of Infrared Observations* (NASA RP 1118), covering observations published through 1982. Additional identifications were located by correlating these names with identifications contained in other machine-readable astronomical catalogs in the NASA National Space Science Data Center. This cross index contains some 80,000 different source names for over 27,000 unique infrared sources.

The catalog contains the 1950 position for each object as well as designations from the following catalogs: *IRAS*, *Two-Micron Sky Survey*, *Air Force Geophysical Laboratory*, *The Henry Draper*, *a Durchmusterung*, *The Bright Star Catalogue*, *the Boss General Catalog*, *the Dearborn Observatory*, and *the Smithsonian Astrophysical Observatory*.

**References:**

Schmitz, M., Mead, J.M., and Gezari, D.Y. 1987, NASA Ref. Publ. 1182  
 Gezari, D.Y., Schmitz, M., and Mead, J.M., 1984, NASA Reference  
 Publication 1118, NASA, Scientific and Technical Information

**File Information:** 1 file, 6.26 Mbytes      **Status:** Has been checked for consistency  
 Documentation in hard copy form only  
 Available via network

**ADC 4905**

Nagy, T.A.

**General Catalogue of Variable Stars, 2nd Ed.: Table 1 - Nomenclature (1978)****Keywords:** *cross identifications; variable stars*

**Description:** *The General Catalogue of Variable Stars (GCVS), 2nd Edition* (Kukarin et al. 1958) contains 21 cross identification tables that connect the many types of names historically given to variable stars with the standardized designations, especially those used in the *GCVS* and the *Catalogue of Suspected Variables (CVS)*. This catalog contains Table 1 of the *GCVS2*, which lists all cross identifications. It includes *GCVS* IDs, Flamsteed numbers, numbering systems for *Durchmusterung (DM)* catalogs, *The Henry Draper (HD) Catalogue*, *General Catalogue (GC)*, variable star designa-

tions for *Astronomische Nachrichten (AN)*, Harvard College Observatory (HV), *Soviet Variable Stars (SVS)*, Sonneberg Observatory (S), *Prager Catalogue (P)*, *Catalogue of Suspected Variables (CSV)*, *Ross Catalogue (ROSS)*, *Zinner Catalogue (ZI)*, Oklahoma University Observatory (OV), Nova objects (NOVA), Bamberg Observatory (BV), *Innes Catalogue (INNES)*, Bologna Observatory (VB), Vatican Observatory (VV), Tokyo Observatory (TV), other identifiers, and additional information for stars in the *GCVS, 2nd Edition*.

**References:**

**Nagy, T.A. 1978, unpublished**

Kukarkin, B.V., Parenago, P.P., Efremov, Yu.N., and Kholopov, P.N. 1958, General Catalogue of Variable Stars (2nd ed., Publishing House of the Academy of Sciences of the U.S.S.R.)

**File Information:** 1 file, 4.79 Mbytes      **Status:** Has been checked for consistency  
 Available in microform versions  
 Documentation in hard copy form only  
 Available via network

**ADC 4906**

**Nagy, T.A.**

**General Catalogue of Variable Stars, 2nd Ed.: Table 6 - Correspondences  
 BD/CD/CPD (1976)**

**Keywords:** *cross identifications; variable stars*

**Description:** The *General Catalogue of Variable Stars (GCVS), 2nd Edition* (Kukarkin et al. 1958) contains 21 cross identification tables that connect the many types of names historically given to variable stars with the standardized designations, especially those used in the *GCVS* and the *Catalogue of Suspected Variables (CSV)*. This catalog contains Table 6, which lists *Durchmusterung (DM)* catalog numbers, *Catalogue of Suspected Variables (CSV)* numbers, coordinate designations, *GCVS* numbers, and other identifiers for stars in the *GCVS, 2nd Edition*.

**References:**

**Nagy, T.A. 1976, unpublished**

Kukarkin, B.V., Parenago, P.P., Efremov, Yu.N., and Kholopov, P.N. 1958, General Catalogue of Variable Stars (2nd ed., Publishing House of the Academy of Sciences of the U.S.S.R.)

**File Information:** 1 file, 404 Kbytes      **Status:** Has been checked for consistency  
 Documentation in hard copy form only  
 Available in microfilm version  
 Available via network

**ADC 4914**

**Warren Jr., W.H.**

**AGK3-BD Cross-Index (1978)**

**Keywords:** *cross identifications*

**Description:** The machine-readable cross identification catalogs have been prepared by extracting *AGK3* and *BD* numbers from the machine version of the *AGK3 Catalogue* (Dieckvoss et al. 1975). The catalog includes *AGK3* numbers, *BD* numbers, component designations for multiple systems, and designations for *BD* supplemental stars.

**References:**

Warren Jr., W.H. 1978, *CDS Bull. No. 15*, p. 116

Dieckvoss, W., Kox, H., Gunther, A., and Brosterhus, E. 1975, *AGK3 Star Catalogue of Positions and Proper Motions North of  $-2.5^\circ$  Declination* (Hamburg-Bergedorf: Hamburger Sternwarte)

**File Information:** 1 file, 3.49 Mbytes

**Status:** Has been checked for consistency

Documentation in hard copy form only

Available via network

**ADC 4915**

Warren Jr., W.H.

**BD-AGK3, with Non-BD Stars Omitted (1978)**

**Keywords:** *cross identifications*

**Description:** The machine-readable cross identification catalogs (Warren 1978) have been prepared by extracting *AGK3* and *BD* numbers from the magnetic tape version of the *AGK3* (Dieckvoss et al. 1975). After preparation of the *AGK3-BD* file, which contains all stars in the *AGK3*, the file was sorted according to *BD* number and rearranged so that the *BD* number occurs at the beginning of each record. During the sorting operation all *AGK3* stars having no *BD* numbers were omitted. The catalog is especially useful for finding *BD* stars in the *AGK3* catalog, since precession has moved stars across declination boundaries, and it often has been necessary to examine more than one *AGK3* zone to locate (or confirm the absence of) a *BD* star in the catalog. The catalog includes *BD* numbers, component designations for multiple stars and *BD* supplemental stars, and *AGK3* numbers.

**References:**

Warren Jr., W.H. 1978, *CDS Bull. No. 15*, p. 116

Dieckvoss, W., Kox, H., Gunther, A., and Brosterhus, E. 1975, *AGK3 Star Catalogue of Positions and Proper Motions North of  $-2.5^\circ$  Declination* (Hamburg-Berdedorf: Hamburger Sternwarte)

**File Information:** 1 file, 3.42 Mbytes

**Status:** Has been checked for consistency

Documentation in hard copy form only

Available via network

**ADC 4916**

Nagy, T.A.

**General Catalogue of Variable Stars, 2nd Ed.: Table 4 - Flamsteed Correspondences (1978)**

**Keywords:** *cross identifications; variable stars*

**Description:** The *General Catalogue of Variable Stars (GCVS), 2nd Edition* (Kukarkin et al. 1958) contains 21 cross identification tables that connect the many types of names historically given to variable stars with the standardized designations, especially those used in the *GCVS* and the *Catalogue of Suspected Variables (CSV)*. This catalog contains Table 4, which lists Flamsteed numbers, *Catalogue of Suspected Variables (CSV)* numbers, coordinate designations, and star names (Bayer designations of bright stars) for stars in the *GCVS, 2nd Edition*.

**References:**

Nagy, T.A. 1978, unpublished

Kukarkin, B.V., Parenago, P.P., Efremov, Yu.N., and Kholopov, P.N. 1958, *General Catalogue of Variable Stars* (2nd ed., Publishing House of the Academy of Sciences of the U.S.S.R.)

**File Information:** 1 file, 24.2 Kbytes

**Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 4917**

Nagy, T.A.

General Catalogue of Variable Stars, 2nd Ed.: Table 2 - Bayer Correspondences (1978)

**Keywords:** *cross identifications; variable stars*

**Description:** The *General Catalogue of Variable Stars (GCVS), 2nd Edition* (Kukarkin et al. 1958) contains 21 cross identification tables that connect the many types of names historically given to variable stars with the standardized designations, especially those used in the *GCVS* and the *Catalogue of Suspected Variables (CSV)*. This catalog contains Table 2, which lists Bayer designations, *Catalogue of Suspected Variables (CSV)* numbers, coordinate designations, and other identifiers for stars in the *GCVS, 2nd Edition*.

**References:**

Nagy, T.A. 1978, unpublished

Kukarkin, B.V., Parenago, P.P., Efremov, Yu.N., and Kholopov, P.N. 1958, *General Catalogue of Variable Stars* (2nd ed., Publishing House of the Academy of Sciences of the U.S.S.R.)

**File Information:** 1 file, 11.5 Kbytes

**Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 4918**

Nagy, T.A.

General Catalogue of Variable Stars, 2nd Ed.: Table 5 - BS=HR Correspondences (1978)

**Keywords:** *cross identifications; variable stars*

**Description:** The *General Catalogue of Variable Stars (GCVS), 2nd Edition* (Kukarkin et al. 1958) contains 21 cross identification tables that connect the many types of names historically given to variable stars with the standardized designations, especially those used in the *GCVS* and the *Catalogue of Suspected Variables (CSV)*. This catalog contains Table 5, which lists *The Bright Star Catalogue* number, *Catalogue of Suspected Variables (CSV)* numbers, coordinate designations, *GCVS* identifiers, and other identifiers for stars in the *GCVS, 2nd Edition*.

**References:**

Nagy, T.A. 1978, unpublished

Kukarkin, B.V., Parenago, P.P., Efremov, Yu.N., and Kholopov, P.N. 1958, *General Catalogue of Variable Stars* (2nd ed., Publishing House of the Academy of Sciences of the U.S.S.R.)

**File Information:** 1 file, 60.3 Kbytes      **Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 4919**

Nagy, T.A.

**General Catalogue of Variable Stars, 2nd Ed.: Table 12 - Ross Correspondences (1978)**

**Keywords:** *cross identifications; variable stars*

**Description:** The *General Catalogue of Variable Stars (GCVS), 2nd Edition* (Kukarkin et al. 1958) contains 21 cross identification tables that connect the many types of names historically given to variable stars with the standardized designations, especially those used in the *GCVS* and the *Catalogue of Suspected Variables (CSV)*. This catalog contains Table 12, which lists Ross numbers, *Catalogue of Suspected Variables (CSV)* numbers, coordinate designations, *GCVS* numbers, and other identifiers for stars in the *GCVS, 2nd Edition*.

**References:**

Nagy, T.A. 1978, unpublished

Kukarkin, B.V., Parenago, P.P., Efremov, Yu.N., and Kholopov, P.N. 1958, *General Catalogue of Variable Stars* (2nd ed., Publishing House of the Academy of Sciences of the U.S.S.R.)

**File Information:** 1 file, 13.0 Kbytes      **Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 4920**

Nagy, T.A.

**General Catalogue of Variable Stars, 2nd Ed.: Table 13 - Innes Correspondences (1978)**

**Keywords:** *cross identifications; variable stars*

**Description:** The *General Catalogue of Variable Stars (GCVS), 2nd Edition* (Kukarkin et al. 1958) contains 21 cross identification tables that connect the many types of names historically given to variable stars with the standardized designations, especially those used in the *GCVS* and the *Catalogue of Suspected Variables (CSV)*. This catalog contains Table 13, which lists Innes numbers, *Catalogue of Suspected Variables (CSV)* numbers, coordinate designations, *GCVS* numbers, and other identifiers for stars in the *GCVS, 2nd Edition*.

**References:**

**Nagy, T.A. 1978, unpublished**

Kukarkin, B.V., Parenago, P.P., Efremov, Yu.N., and Kholopov, P.N. 1958, *General Catalogue of Variable Stars* (2nd ed., Publishing House of the Academy of Sciences of the U.S.S.R.)

**File Information:** 1 file, 6.95 Kbytes

**Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 4921**

**Nagy, T.A.**

**General Catalogue of Variable Stars, 2nd Ed.: Table 14 - Bamberg Correspondences (1978)**

**Keywords:** *cross identifications; variable stars*

**Description:** The *General Catalogue of Variable Stars (GCVS), 2nd Edition* (Kukarkin et al. 1958) contains 21 cross identification tables that connect the many types of names historically given to variable stars with the standardized designations, especially those used in the *GCVS* and the *Catalogue of Suspected Variables (CSV)*. This catalog contains Table 14, which lists BV numbers (variables discovered at the Bamberg Observatory), *Catalogue of Suspected Variables (CSV)* numbers, coordinate designations, *GCVS* numbers, and other identifiers for stars in the *GCVS, 2nd Edition*.

**References:**

**Nagy, T.A. 1978, unpublished**

Kukarkin, B.V., Parenago, P.P., Efremov, Yu.N., and Kholopov, P.N. 1958, *General Catalogue of Variable Stars* (2nd ed., Publishing House of the Academy of Sciences of the U.S.S.R.)

**File Information:** 1 file, 3.52 Kbytes

**Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 4922**

**Nagy, T.A.**

**General Catalogue of Variable Stars, 2nd Ed.: Tables 15 - 18 Oklahoma (OK), Bologna (VB), Vatican (VV), Tokyo (TV) Observatory Correspondences (1978)**

**Keywords:** *cross identifications; variable stars*

**Description:** The *General Catalogue of Variable Stars (GCVS), 2nd Edition* (Kukarkin et al. 1958) contains 21 cross identification tables that connect the many types of names historically given to variable stars with the standardized designations, especially those used in the *GCVS* and the *Catalogue of Suspected Variables (CSV)*. This catalog contains Tables 15-18, which list variable-star designations of Oklahoma University (OV), Bologna Observatory (VB), Vatican Observatory (VV), and Tokyo Observatory (TV), *Catalogue of Suspected Variables (CSV)* numbers, coordinate designations, *GCVS* numbers, and other identifiers for stars in the *GCVS, 2nd Edition*.

**References:**

Nagy, T.A. 1978, unpublished

Kukarkin, B.V., Parenago, P.P., Efremov, Yu.N., and Kholopov, P.N. 1958, General Catalogue of Variable Stars (2nd ed., Publishing House of the Academy of Sciences of the U.S.S.R.)

**File Information:** 1 file, 2.64 Kbytes      **Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 4923**

Nagy, T.A.

General Catalogue of Variable Stars, 2nd Ed.: Table 10 - Sonneberg  
Correspondences (1978)

**Keywords:** *cross identifications; variable stars*

**Description:** The *General Catalogue of Variable Stars (GCVS), 2nd Edition* (Kukarkin et al. 1958) contains 21 cross identification tables that connect the many types of names historically given to variable stars with the standardized designations, especially those used in the *GCVS* and the *Catalogue of Suspected Variables (CSV)*. This catalog contains Table 10, which lists variable-star numbers for Sonneberg Observatory, *Catalogue of Suspected Variables (CSV)* numbers, *GCVS* numbers, and coordinate designations for stars in the *GCVS, 2nd Edition*.

**References:**

Nagy, T.A. 1978, unpublished

Kukarkin, B.V., Parenago, P.P., Efremov, Yu.N., and Kholopov, P.N. 1958, General Catalogue of Variable Stars (2nd ed., Publishing House of the Academy of Sciences of the U.S.S.R.)

**File Information:** 1 file, 61.1 Kbytes      **Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 4924**

Nagy, T.A.

General Catalogue of Variable Stars, 2nd Ed.: Table 7 - Henry Draper  
Correspondences (1978)

**Keywords:** *cross identifications; variable stars*

**Description:** The *General Catalogue of Variable Stars (GCVS), 2nd Edition* (Kukarkin et al. 1958) contains 21 cross identification tables that connect the many types of names historically given to variable stars with the standardized designations, especially those used in the *GCVS* and the *Catalogue of Suspected Variables (CSV)*. This catalog contains Table 7, which lists *Henry Draper Catalogue* numbers, *Catalogue of Suspected Variables (CSV)* numbers, coordinate designations, *GCVS* numbers, and other identifiers for stars in the *GCVS, 2nd Edition*.

**References:**

**Nagy, T.A. 1978, unpublished**

Kukarkin, B.V., Parengo, P.P., Efremov, Yu.N., and Kholopov, P.N. 1958, *General Catalogue of Variable Stars* (2nd ed., Publishing House of the Academy of Sciences of the U.S.S.R.)

**File Information:** 1 file, 196 Kbytes

**Status:** Has been checked for consistency

Documentation in hard copy form only

Available via network

**ADC 4925**

Nagy, T.A.

**General Catalogue of Variable Stars, 2nd Ed.: Table 21 - Catalogue of Suspected Variables Correspondences (1978)**

**Keywords:** *cross identifications; variable stars*

**Description:** The *General Catalogue of Variable Stars (GCVS), 2nd Edition* (Kukarkin et al. 1958) contains 21 cross identification tables that connect the many types of names historically given to variable stars with the standardized designations, especially those used in the *GCVS* and the *Catalogue of Suspected Variables (CSV)*. This catalog contains Table 21, which lists *Catalogue of Suspected Variables (CSV)* numbers and *GCVS* numbers for stars in the *GCVS, 2nd Edition*.

**References:**

**Nagy, T.A. 1978, unpublished**

Kukarkin, B.V., Parengo, P.P., Efremov, Yu.N., and Kholopov, P.N. 1958, *General Catalogue of Variable Stars* (2nd ed., Publishing House of the Academy of Sciences of the U.S.S.R.)

**File Information:** 1 file, 14.2 Kbytes

**Status:** Has been checked for consistency

Documentation in hard copy form only

Available via network

**ADC 4926**

Nagy, T.A.

**General Catalogue of Variable Stars, 2nd Ed.: Table 8 - Astronomische Nachrichten (AN) Correspondences (1978)**

**Keywords:** *cross identifications; variable stars*

**Description:** The *General Catalogue of Variable Stars (GCVS), 2nd Edition* (Kukarkin et al. 1958) contains 21 cross identification tables that connect the many types of names historically given to variable stars with the standardized designations, especially those used in the *GCVS* and the *Catalogue of Suspected Variables (CSV)*. This catalog contains Table 8, which lists Astronomische Nachrichten numbers, *GCVS* numbers, *Catalogue of Suspected Variables (CSV)* numbers, and remarks for stars in the *GCVS, 2nd Edition*.

**References:**

**Nagy, T.A. 1978, unpublished**

Kukarkin, B.V., Parengo, P.P., Efremov, Yu.N., and Kholopov, P.N. 1958, General Catalogue of Variable Stars (2nd ed., Publishing House of the Academy of Sciences of the U.S.S.R.)

**File Information:** 1 file, 360 Kbytes

**Status:** Has been checked for consistency

Documentation in hard copy form only

Available via network

**ADC 4927**

Nagy, T.A.

General Catalogue of Variable Stars, 2nd Ed.: Table 9 - Harvard Variable (HV) Correspondences (1978)

**Keywords:** *cross identifications; variable stars*

**Description:** The *General Catalogue of Variable Stars (GCVS), 2nd Edition* (Kukarkin et al. 1958) contains 21 cross identification tables that connect the many types of names historically given to variable stars with the standardized designations, especially those used in the *GCVS* and the *Catalogue of Suspected Variables (CSV)*. This catalog contains Table 9, which lists Harvard Variable (HV) numbers, *GCVS* numbers, *Catalogue of Suspected Variables (CSV)* numbers, and coordinate designations for stars in the *GCVS, 2nd Edition*.

**References:**

**Nagy, T.A. 1978, unpublished**

Kukarkin, B.V., Parengo, P.P., Efremov, Yu.N., and Kholopov, P.N. 1958, General Catalogue of Variable Stars (2nd ed., Publishing House of the Academy of Sciences of the U.S.S.R.)

**File Information:** 1 file, 269 Kbytes

**Status:** Has been checked for consistency

Documentation in hard copy form only

Available via network

**ADC 4928**

Nagy, T.A.

General Catalogue of Variable Stars, 2nd Ed.: Table 11 - SVS (Variables Discovered in U.S.S.R.) Correspondences (1978)

**Keywords:** *cross identifications; variable stars*

**Description:** The *General Catalogue of Variable Stars (GCVS), 2nd Edition* (Kukarkin et al. 1958) contains 21 cross identification tables that connect the many types of names historically given to variable stars with the standardized designations, especially those used in the *GCVS* and the *Catalogue of Suspected Variables (CSV)*. This catalog contains Table 11, which lists Soviet Variable Star (SVS) numbers (variables discovered in the U.S.S.R.), *Catalogue of Suspected Variables (CSV)* numbers, coordinate designations, *GCVS* numbers, and other identifiers for stars in the *GCVS, 2nd Edition*.

**References:**

Nagy, T.A. 1978, unpublished

Kukarkin, B.V., Parengo, P.P., Efremov, Yu.N., and Kholopov, P.N. 1958, General Catalogue of Variable Stars (2nd ed., Publishing House of the Academy of Sciences of the U.S.S.R.)

**File Information:** 1 file, 55.1 Kbytes

**Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 4929**

Nagy, T.A.

**General Catalogue of Variable Stars, 2nd Ed.: Table 20 - Prager (P)  
Correspondences (1978)**

**Keywords:** *cross identifications; variable stars*

**Description:** The *General Catalogue of Variable Stars (GCVS), 2nd Edition* (Kukarkin et al. 1958) contains 21 cross identification tables that connect the many types of names historically given to variable stars with the standardized designations, especially those used in the *GCVS* and the *Catalogue of Suspected Variables (CSV)*. This catalog contains Table 20 which lists Prager numbers (numbers assigned by R. Prager 1934, 1937), *Catalogue of Suspected Variables (CSV)* numbers, coordinate designations, *GCVS* numbers, and other identifiers for stars in the *GCVS, 2nd Edition*.

**References:**

Nagy, T.A. 1978, unpublished

Kukarkin, B.V., Parengo, P.P., Efremov, Yu.N., and Kholopov, P.N. 1958, General Catalogue of Variable Stars (2nd ed., Publishing House of the Academy of Sciences of the U.S.S.R.)

Prager, R., 1934, Erg A.N., 9, No. 3

Prager, R., 1937, Erg A.N., 10, No. 1

**File Information:** 1 file, 261 Kbytes

**Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 4930**

Nagy, T.A.

**General Catalogue of Variable Stars, 2nd Ed.: Table 19 - Zinner (Z)  
Correspondences (1978)****Keywords:** *cross identifications; variable stars*

**Description:** The *General Catalogue of Variable Stars (GCVS), 2nd Edition* (Kukarkin et al. 1958) contains 21 cross identification tables that connect the many types of names historically given to variable stars with the standardized designations, especially those used in the *GCVS* and the *Catalogue of Suspected Variables (CSV)*. This catalog contains Table 19, which lists variable-star numbers assigned by Zinner (1929), *Catalogue of Suspected Variables (CSV)* numbers, *GCVS* numbers, and additional descriptions for stars in the *GCVS, 2nd Edition*.

**References:**

Nagy, T.A. 1978, unpublished

Kukarkin, B.V., Parengo, P.P., Efremov, Yu.N., and Kholopov, P.N. 1958, General Catalogue of Variable Stars (2nd ed., Publishing House of the Academy of Sciences of the U.S.S.R.)

**File Information:** 1 file, 64.2 Kbytes**Status:** Has been checked for consistency

Documentation in hard copy form only

Available via network

**3.5 Combined and Derived Data****ADC 5001A**

Gliese, W.

**Catalogue of Nearby Stars (1969)****Keywords:** *nearby stars*

**Description:** This catalog is a machine-readable version of the 1969 *Catalog of Nearby Stars*, which is an update to the first edition made in 1957. The catalog lists all 915 stars of the original edition, almost all known stars having trigonometric parallaxes  $\geq 0.045$ , although in some cases the mean values of trigonometric and spectral or photometric parallaxes are  $< 0.045$ . Pleiades stars and the carbon star X Cnc have been omitted. The catalog also contains stars with mean (resulting) parallaxes  $\geq 0.045$ . The entire catalog contains 1529 single stars and systems with a total of 1890 components (not including spectroscopic and astrometric companions).

**Reference:**

Gliese, W. 1969, Veröff. Astron. Rechen-Inst. Heidelb., No. 22

**File Information:** 1 file, 241 Kbytes**Status:** Has been checked for consistency  
Available in microfiche version  
Documentation in hard copy form only  
Available via network**ADC 5013A****Azzopardi, M., and Vigneau, J.****Probable Members of the Small Magellanic Cloud (1975)****Keywords:** *Magellanic Clouds*

**Description:** An objective prism survey was conducted to discover probable members of the Small Magellanic Cloud. Interference filters were used to restrict the wavelength range and, hence, decrease the background and crowding. The limiting absolute magnitude of the survey is about -4.5. The 1975 paper listed 506 stars that show high luminosity characteristics; 193 of them had been confirmed by other authors. The 1979 paper added 14 additional probable members and photometric observations of 11 stars from the earlier paper that confirmed their membership. For completeness, four new Wolf-Rayet stars detected by Azzopardi and Breysacher (1978) were included. The catalog contains a catalog number in order of right ascension with the suffixes "a" or "b" used for the newer stars interpolated in the original list. Also included are the 1975 position, the MK spectral classification, the V magnitude, the (B-V) and (U-B) color indices, the number of observations, the identification chart number, and remarks indicating previous identifications.

**References:**Azzopardi, M., and Vigneau, J. 1975, *A&AS*, 22, 285Azzopardi, M., and Vigneau, J. 1979, *A&AS*, 35, 353**File Information:** 1 file, 37.1 Kbytes**Status:** Has been checked for consistency  
Available via network**ADC 5025B****Hoffleit, D.****The Bright Star Catalogue, 4th Revised Edition (1982)****Keywords:** *bright stars; combined data*

**Description:** The catalog is a compilation of important astronomical and astrophysical data for stars brighter than visual magnitude 6.50 (although this limit is not precise in the modern standard magnitude system [UBV]). The stars are sequentially numbered in order of 1900 right ascension. Data included are BS=HR number; name; *DM* number; *HD* number; double-star code or identification; variable-star identification; right ascension (B1900) declination, right ascension (B2000) declination; galactic coordinates; V magnitude; B-V, U-B, R-I colors; spectral type; annual proper motions; parallax; radial velocity (km/s); projected rotational velocity  $v \sin i$  (km/s). Data included for multiple stars are magnitude difference, separation (arcsec), component identifications (A, B, ...), and number of components (N). A remarks flag is included as a pointer to a remarks file. A second file contains an introduction to the remarks file, and a third file contains the actual remarks for stars flagged in

the data file. There are 14 objects (nine novae or supernovae, four globular clusters, and Messier 31 [the Andromeda galaxy]) that had been assigned HR numbers by E. C. Pickering (Harvard Revised Photometry, Ann. Harvard College Obs. 50, 1908) and whose sequential numbers have been retained but with information on name, variable-star designation, or year of outburst only; thus, only 9096 of the 9110 data records have the normal complement of data. NOTE: It is important to note that the  $v \sin i$  descriptive character field, in addition to the characters "<" and ">", may contain upper limit (LE, hexadecimal code '8C') characters: This character has no equivalent in ASCII internal coding; thus, all occurrences of this character are translated to EBCDIC code 3F. This also occurs for the brackets characters "[" (hex. 'AD', punch code 11-0-5-8) and "]" (hex. 'BD', punch code 12-11-0-5-8) in the second and third files, which are present in random places throughout the records. Since all EBCDIC characters without ASCII equivalents translate to '3F', there is no way, except by context, to reconstruct the correct characters.

**Reference:**

Hoffleit, D. 1982, Yale University Observatory (with the collaboration of C. Jaschek)

**File Information:** 4 files, 2.91 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 5031**

Rubin, V.C., et al.

**Kinematic Studies of Early-Type Stars (1962)**

**Keywords:** *early-type stars; OB stars*

**Description:** This catalog contains radial velocities accurate to within 5 km/sec for 1440 O-B5 stars located within 3 kpc of the Sun and within  $10^\circ$  of the galactic equator. Radial velocities, luminosities, and spectral types have been included from the literature. Also included are a note as to whether a proper motion had been published; the GCRV number; the *HD* number or another identification; galactic coordinates; right ascension and declination; the apparent visual magnitude; the spectrum; the absolute magnitude, when available; the visual absorption; the proper motion on the N30 system; the annual proper motion in galactic coordinates; the distance modulus and the distance from the Sun, computed from the distance modulus; the distance from the galactic center; the tangential motion in galactic coordinates; the space motion with respect to the Sun and to the galactic center; and the sources of each datum.

**Reference:**

Rubin, V.C., Burley, J., Kaisatpoor, A., Klock, B., Pease, G., Rutscheidt, E., and Smith, C. 1962, *AJ*, 67, 491

**File Information:** 1 file, 251 Kbytes      **Status:** Has been checked for consistency  
 Available via network  
 Full documentation available

**ADC 5032**

Woolley, R.v.d.R., et al.

**Catalogue of Stars within 25 Parsecs of the Sun (1970)****Keywords:** *nearby stars*

**Description:** This catalog was constructed at the Royal Greenwich Observatory in order to enlarge the Gliese (1957) compilation. It contains data on stars nearer than 25 pc that are not included in Gliese's catalog, plus additional information published since 1957 on stars in the Gliese catalog. The machine version contains essentially all information given in Table Ia of the published catalog, plus positional data, and most cross references to other catalogs given in Table IIa. The notes flags in Table Ia are not included because the notes are not machine-readable. Omitted from Table IIa are the finding-chart indicators (Lowell G numbers or notes references) and miscellaneous cross identifications to other names and catalog identifiers. Tables Ib and IIb, containing 21 systems originally included in Gliese's (1957) catalog but for which revised parallaxes have placed them farther than 25 pc are not included in the machine version. Data in the machine version are Gliese number (Newly added stars begin with 9001, but new parallaxes have removed 9419 and added 9849 and 9850; the Sun [first record] has number 0.); component identifications for multiple systems; parallax; annual proper motions; radial velocity; (U,V,W) space velocities; box orbit parameters (pomega, e, i); spectral type; UBV data; absolute visual magnitude; right ascension (B1950) declination, GCTP (Jenkins 1952, 1963); *HD*, *DM*, *GCRV* (Wilson 1953) and other catalog identifiers; *BS* (= HR) (Hoffleit 1964) numbers; and remarks codes for SB, doubles, variables, etc.

**References:**

- Woolley, R.v.d.R., Epps, E.A., Penston, M.J., and Poccock, S.B. 1970, *Royal Obs. Ann.* 5
- Gliese, W. 1957, *Katalog der Sterne naher als 20 Parsek für 1950.0*, *Astron. Rechen-Inst. Heidelb., Mitt. A*, Nr. 8
- Jenkins, L.F. 1952, *General Catalogue of Trigonometric Stellar Parallaxes* (New Haven: Yale University Observatory)
- Jenkins, L.F. 1963, *Supplement to the General Catalogue of Trigonometric Stellar Parallaxes* (New Haven: Yale University Observatory)
- Wilson, R.E. 1953, *General Catalogue of Stellar Radial Velocities*, *Publ. Carnegie Inst., Washington*, No. 601

**File Information:** 2 files, 342 Kbytes

**Status:** Has been checked for consistency  
 Available in microfiche version  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 5036B**

Hoffleit, D., Saladyga, M., and Wlasuk, P.

**A Supplement to the Bright Star Catalogue (1983)****Keywords:** *combined data*

**Description:** The catalog is an extension of the recently published *BSC4* (Hoffleit 1982) and contains compiled data on stars for which photoelectric determinations are given as 7.10V or brighter and that are not already included in the latter catalog. The data included in the supplement are basically the same as those in the *BSC4* itself, and the format of the machine version is very similar. Notable differences include the omission of the NAME column, since very few supplement stars have Bayer or Flamsteed designations, and its replacement with the SAO number. Also, the parallax field includes only data determined from trigonometric methods; all dynamical parallax data have been relegated to the REMARKS. Position-angle data are given in the main table for double stars, whereas they were contained, if reported, only in the REMARKS file of the *BSC4*. Remarks for supplement stars are given in a separate file of the machine version and are present for 49% of the stars. The introductory file contains the text given in the introduction to the published catalog except that the figures are, of course, not included. Data included are *HD* number; *DM* number; SAO number; double-star code or identification; variable-star identification; right ascension (B1900) declination, right ascension (B2000) declination; galactic coordinates; V magnitude; B-V, U-B, R-I colors; spectral type; annual proper motions; parallax; radial velocity (km/s); and projected rotational velocity  $v \sin i$  (km/s). Data included for multiple stars are magnitude difference, separation (arcsec), position angle (PA) of components, component identifications (A, B, ...), and number of components (N). A remarks flag is included as a pointer to a remarks file. The third file contains the actual remarks for stars flagged in the data file. It should be noted that the  $v \sin i$  descriptive character field, in addition to the characters "<" and ">," may contain lower limit (GE, hexadecimal code AE) or upper limit (LE, hexadecimal code 8C) characters: These characters have no equivalents in ASCII internal coding; thus, it can be inconvenient to translate the data file to ASCII, where the two characters are translated to the same nonexistent EBCDIC code 3F and become indistinguishable.

**Reference:**

Hoffleit, D., Saladyga, M., and Wlasuk, P. 1983, Yale University Obs.

**File Information:** 4 files, 866 Kbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 5038**

**Carnochan, D.J.**

**Ultraviolet Star Catalogue (1979)**

**Keywords:** *ultraviolet photometry; combined data*

**Description:** This catalog contains the absolute fluxes in four passbands (centered on 1565, 1965, 2365, and 2740 Å) for 312115 stars. The fluxes were measured by the S2/68 Ultraviolet Sky Survey Telescope aboard the ESRO TD1 satellite. For each of the stars, the signal-to-noise ratio is at least 10.0 in any one of the four passbands. The catalog contains the S2/68 number and numbers in the *HD*, *DM*, *SAO*, and *The Bright Star Catalogues*. Also included are the star name; positions and proper motions in radians; the B and V magnitudes; the B-V, U-B, b-y, m1, and c1 colors; the H- $\beta$  index; spectral type and peculiarities, if any; radial velocity; and the rotational velocity.

**Reference:**

Carnochan, D.J. 1979, CDS Bull. No. 17, p. 78

**File Information:** 2 files, 7.77 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Description for machine version

**ADC 5039**

Worley, C.E., and Heintz, W.D.

**Fourth Catalog of Orbits of Visual Binary Stars (1983)**

**Keywords:** *double and multiple stars; orbits of binaries*

**Description:** *The Finsen-Worley Catalog (1970)*, supplemented by all subsequently published orbits known to Worley and Heintz as of 1 July 1982, formed the basis for the present compilation. Practically all stars having visual orbits were reobserved in the preceding decade, often repeatedly either with micrometers or with speckle interferometers. Astrometric solutions are included but only if they were judged to be relatively certain. Orbits with period greater than 4000 years and hyperbolic orbits were rejected as being unreliable. The catalog contains 928 orbits of 847 systems (counting triples as two systems). There are 23 orbits of unresolved systems. The catalog contains for each system the names of the star and the components involved, the 1900 position, the ADS number, the magnitude and spectral type for each component, the orbital elements, the equinox of the node, the quality of the orbit, the date of the last observation, the inclusive dates for which an ephemeris is given by the author, the computer of the orbit, and a reference.

**References:**

Worley, C.E., and Heintz, W.D. 1983, Publ. U.S. Naval Obs. (2) 24, Part VII  
 Finsen, W.S. and Worley, C.E., 1970, Republic Obser., Circ. 7, 203

**File Information:** 3 files, 429 Kbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Description for machine version

**ADC 5042**

Svechnikov, M.A., and Bessonova, L.A.

**Catalogue of Orbital Elements, Masses, and Luminosities of Close Double Stars (1984)**

**Keywords:** *orbits of binaries; stellar masses; luminous stars; eclipsing binaries*

**Description:** This catalog is the new edition of the catalog of photometric and absolute elements of close double systems (Svechnikov 1969). New photometric and spectroscopic results published concerning orbital elements of the eclipsing binaries have made it necessary to revise the data in Svechnikov's 1969 catalog. The work was done on the basis of the card catalog of photometric, spec-

troscopic, and absolute elements of close binary stars compiled by M.A. Svechnikov since 1962 up to 1981. The stars are divided from their geometrical and physical characteristics into the following six types: detached main sequence-systems, semi-detached systems with subgiant secondary, detached systems with "undersized" subgiant secondary, contact eclipsing binaries, eclipsing binaries similar to WU Ma-type systems, and the AR Lac-type systems.

**References:**

- Svechnikov, M.A., and Bessonova, L.A. 1984, CDS Bull. No. 26, p. 99  
 Svechnikov, M.A. 1969, Publ. Ural State Univ. (Sverdlovsk), Ser. Astr. 5, no. 88, 178  
 Svechnikov, M.A., and Snezhko, L.I. 1974, in Evidences of Non-Stationary and Stellar Evolution, ed. A. Boyarchuk and Ju. N. Efremov, Nauka, Moscow, 181

**File Information:** 7 files, 1022 Kbytes      **Status:** Is distributed as received  
 Available via network

**ADC 5050**

Hoffleit, D., and Warren Jr., W.H.

**The Bright Star Catalogue, 5th Revised Edition (1986)**

**Keywords:** *bright stars; combined data*

**Description:** This catalog is a widely used source of basic astronomical and astrophysical data for stars brighter than magnitude 6.5. For 9110 objects (Fourteen objects cataloged in the original compilation are novae or extragalactic objects that have been retained to maintain the numbering.) the catalog contains the identifications of the stars in several other widely used catalogs as well as common, Bayer, and Flamsteed names. It also contains multiple star identifications, identifications of variability and variable star identifiers, equatorial positions for B1900 and J2000, galactic coordinates, UBVRi photoelectric photometry data when they exist or similar magnitudes, spectral types on the Morgan-Keenan (MK) system, proper motions (J2000), dynamical and trigonometric parallaxes, and radial and rotational velocities. An extensive remarks file gives more detailed information on individual entries including colors, polarization, stellar diameters, membership in stellar groups and clusters, and more detailed information on the main entries.

**Reference:**

Hoffleit, D., and Warren Jr., W.H. 1986, Astronomical Data Center, NSSDC/GSFC

**File Information:** 4 files, 2.97 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM

**ADC 5053**

Ochsenbein, F., and Halbwachs, J.L.

**Catalogue of the Brightest Stars (1987)**

**Keywords:** *bright stars; combined data*

**Description:** This catalog includes 1628 stars brighter than 5.01 mag, which were contained in the *Catalogue des Etoiles les Plus Brillantes* by Ochsenbein et al. (1984) with the following differences: Ecliptic coordinates were added to the astronomical data; UBVR photometry was taken from Lanz (1986); the Greek letter delta that appears in some spectral types is now written in the Latin letters instead of the code "<04>"; luminosity classes are coded as integer numbers in an additional column; and the number of components of visual double stars (2) is given. There are two files: The first one is the introduction to the catalog, including byte-by-byte descriptions written in French and English, and the second one is the data file that was compiled from the fourth edition of *The Bright Star Catalogue* (Hoffleit 1982).

**References:**

- Ochsenbein, F., and Halbwachs, J.L. 1987, *Centre de Données Stellaires*  
 Hoffleit D. 1982, *The Bright Star Catalogue*, 4th Edition (in collaboration with C. Jaschek), Yale Observatory  
 Ochsenbein F., Acker A., Legrand E., Poncelet J.M., and Thuet-Fleck E. 1984, *Catalogue des Etoiles les Plus Brillantes*, ed. Acker A., Observatoire de Strasbourg, Centre de Données Stellaires et Planetarium de Strasbourg  
 Lanz T. 1986, *A&AS*, 65, 195

**File Information:** 2 files, 399 Kbytes      **Status:** Is distributed as received  
 Available via network

**ADC 5055**

Roman, N.G.

**A Catalogue of High-Velocity Stars (1955)**

**Keywords:** *high-velocity stars*

**Description:** The catalog provides for 571 high velocity stars north of declination  $-20^\circ$  and brighter than 9.5  $m_v$ , radial velocities, proper motions, MK spectral types, trigonometric and spectroscopic parallaxes, space motions, and the eccentricities and semi-major axes of the orbits projected on the galactic plane. The latter assume that the mass of the galaxy is concentrated within the orbit of each star. The catalog also contains the observed data for 62 additional stars that do not meet the above criteria. Known binaries are identified, and remarks are included for the more extreme spectra.

**Reference:**

- Roman, N.G. 1955, *ApJS*, 2, 198-224

**File Information:** 4 files, 133 Kbytes      **Status:** Has been checked for consistency  
 Available via network

**ADC 5063**

Popper, D.M.

**Popper's Catalog of Astrophysical Parameters (1980)**

**Keywords:** *eclipsing binaries; spectroscopic binaries; stellar diameters; stellar masses; double and*

*multiple stars*

**Description:** This catalog includes a list of 131 binary systems with well determined masses and other astrophysical parameters, with three of the systems having two sets of data. The stars were included based on the recommendations of Dr. D.M. Popper. There are four files to this catalog, the first one containing the description, the second one the data itself, and the third and fourth ones the right-hand and left-hand pages of the printed version of this catalog. Data included are name, period, spectrum,  $\log T_{eff}$ , mass, radius,  $\log L$ , and  $M_v$ .

**References:**

Popper, D.M. 1980, *ARA&A*, 18, 115

Malkov, O.Yu. 1989, *CDS Bull. No. 37*, p. 175

**File Information:** 4 files, 87.9 Kbytes

**Status:** Is distributed as received  
Available via network

**ADC 5070A**

Gliese, W., and Jahreiß, H.

**Catalogue of Nearby Stars, 3rd Edition (Preliminary Version) (1991)**

**Keywords:** *nearby stars*

**Description:** The catalog includes all single and multiple stars known at the time to be within 25 parsecs of the Sun. Included in the compilation are all stars listed in the first (915 stars, Gliese 1957), second (1889 stars, Gliese 1969), and the supplement to the second edition (Gliese and Jahreiß 1979), plus nearly all stars having a trigonometric parallax  $\geq 0.045''$ . The catalog contains approximately 4700 stars, including known components of multiple-star systems. Data included in the catalog are identifier and number (Gl, Gliese 1957, 1969; GJ, Gliese and Jahreiß 1979; Wo, Woolley et al. 1970; NN, newly added stars presently unnumbered); component identifications for multiple systems; right ascension (B1950) declination; proper motions; radial velocity; spectral type; UBVR photometric data; trigonometric parallax; most reliable parallax and corresponding absolute magnitude; (U,V,W) space velocities; and cross identifications to the *HD*, *DM*, *Giclas*, *LHS*, and other catalogs and lists.

**References:**

Gliese, W., and Jahreiß, H. 1991, *Astronomisches Rechen-Institut, Heidelberg*

Gliese, W. 1969, *Catalogue of Nearby Stars, Edition 1969, Veröff. Astron. Rechen-Inst. Heidelberg* Nr. 22, plus Errata List Mai 1971

Gliese, W. 1957, *Katalog der Sterne naher als 20 Parsek für 1950.0, Astron. Rechen-Inst. Heidelberg, Mitt. A, Nr. 8*

Gliese, W., and Jahreiß, H. 1979, *A&AS*, 38, 423

Woolley, R., Epps, E.A., Penston, M.J., and Pocock, S.B. 1970, *Catalogue of Stars within twenty-five parsecs of the Sun, Royal Obs. Ann. No. 5*

**File Information:** 2 files, 949 Kbytes

**Status:** Has been checked for consistency  
Available via network  
Available on CD-ROM  
Description for machine version

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**ADC 5077**

Slater, M.

**SKYMAP Catalog of 248558 Stars, Version 3.7 (1993)****Keywords:** *attitude determination; combined data*

**Description:** The primary function of the SKYMAP catalog is to serve as a data base from which smaller catalogs suitable for satellite guidance operations can be derived. It contains 540 bytes of information for each of approximately 249000 stars brighter than 9.0 in either the blue or the visual region. An attempt has been made to provide positions accurate to one arcsec with less accurate positions flagged. Information is provided on multiple and variable stars. Although *The Henry Draper* and *Smithsonian Astrophysical Observatory Catalogs* have been the primary sources of data, data have been collected from a number of other catalogs as well. Many of the data in SKYMAP have been derived from available information. Thus, it should not be used as a primary source for applications requiring high accuracy. Each star is assigned a number based on its J2000 position. Also included as appropriate are the numbers in the *SAO*, *HD*, *Aitken Double Star*, *Variable Star*, and *DM* catalogs and the star name and variable star name. The position is given with its standard error, for 1900, 1950, and J2000. For J2000 these are provided in both equatorial astronomical coordinates and unit vector form. Proper motions, precession, and the sum of these two quantities are given. Magnitudes are given in the UBV and photographic systems (both blue and visual). UBV colors, interstellar absorption, color excesses (based on distance for most entries) and *HD* and *MK* types are included. Trigonometric parallaxes are given when available. For other stars the distance is derived from spectroscopic parallaxes or the space motion (maximum distance). Radial velocities are given when available; space motions relative to the local standard of rest assume that the radial velocity is zero otherwise. For variable and multiple stars, respectively, additional information includes the variability type and range, period, and epoch, and separation and magnitude difference for the two brightest components; year of observation; and distance to the nearest neighbor, selected on various criteria. Sources are given for much of the data with flags indicating how they were derived. In addition to the normal alphanumeric presentation, many of the fields are also given in a numerically coded form.

**Reference:**

Slater, M. 1993

**File Information:** 1 file, 147 Mbytes**Status:** Is distributed as received  
Full documentation available

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**ADC 5079**

Downes, R.A., and Shara, M.M.

**A Catalog and Atlas of Cataclysmic Variables (1993)****Keywords:** *atlases; novae; variable stars*

**Description:** This catalog contains data for 825 cataclysmic variables. It includes coordinates measured in the reference frame of the Hubble Space Telescope Guide Star Survey for non-novae and from the literature for novae. Also given are the variability type, the magnitude range, references

to finding charts and spectroscopy, the galactic latitude and longitude, and the year of outburst for novae. The two files contain the same data, sorted by right ascension and by constellation, respectively.

**Reference:**

Downes, R.A., and Shara, M.M. 1993, *PASP*, 105, 127

**File Information:** 5 files, 455 Kbytes      **Status:** Has been checked for consistency  
 Available via network  
 Full documentation available

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## 3.6 Miscellaneous

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**ADC 6025**

National Geographic Society, and Palomar Observatory

National Geographic Society and Palomar Observatory Sky Survey Catalogue of Plates (1960)

**Keywords:** *surveys; plate data*

**Description:** This catalog contains plate-center and observational data for all plates of the *National Geographic Society and Palomar Observatory Sky Survey (POSS)* and its *Whiteoak Extension*. The POSS proper consists of photographic reproductions of red-sensitive (Kodak 103a-E) and blue-sensitive (Kodak 103a-O) plates taken of 937 different fields with the 48-inch Palomar Schmidt telescope, covering the entire sky above  $-33^\circ$  declination. This southern limit was extended to about  $-45^\circ$  by J. B. Whiteoak using the same instrument for a series of 100 photographs that have come to be known as the *Whiteoak Extension*; thus, the survey as a whole includes 1037 fields. This version of the catalog consists of plate information reproduced from the *Catalogue of Plates* and plate information on the *Whiteoak Extension* derived from file headers of the SAOPSS II tape (Lund and Dixon 1973). The fields of the catalog are POSS number, modified *Luyten-Palomar (MLP)* number, equatorial coordinates of the plate center (B1950), limits of the right ascension on the plate in radians, galactic coordinate of the plate center, number of *SAO* stars on the plate, observing dates and times, the hour angles for the observations, length of exposure, and seeing rating. The following basic quantities were taken directly from the *Catalogue of Plates*: POSS number, exposure dates and times, hour angles, seeing ratings, and coordinates in sexagesimal units. The following derived quantities were calculated at the ADC: MLP number, equatorial coordinates in radians, right ascension limits, galactic coordinates, and number of *SAO* stars.

**References:**

National Geographic Society, and Palomar Observatory 1960

Lund, J., and Dixon, R. 1973, *PASP*, 85, 230

**File Information:** 2 files, 203 Kbytes**Status:** Has been checked for consistency  
Available via network  
Available on CD-ROM  
Full documentation available**ADC 6029**

Adelman, C.J., et al.

**A Finding List for the Multiplet Table of NSRDS-NBS 3, Sections 1-10 (1985)****Keywords:** *spectroscopy; multiplets; finding lists; atomic physics*

**Description:** The primary references for stellar line identifications in the optical and ultraviolet regions have been *A Multiplet Table of Astrophysical Interest (RMT, Moore 1945)* and *An Ultraviolet Multiplet Table (UMT, Moore 1950, 1952, 1962)*. The present finding list has been prepared from the data published in the first ten sections of the revised tables that have been undertaken by Moore (1965-1983). An earlier finding list containing Sections 1-7 only was published by Adelman, Adelman, and Fischel (1977). The earlier format has been revised, and Sections 8-10 have been appended to produce the present version. The catalog includes elements, atomic species numbers, wavelengths of the transitions, line intensities, excitation potentials, J values, multiplet numbers, and other identification numbers. A description of the Finding List has been published by Adelman et al. (1985).

**References:**

- Adelman, C.J., Adelman, S.J., Fischel, D., and Warren Jr., W.H. 1985, *A&AS*, **60**, 339
- Adelman, C.J., Adelman, S.J. and Fischel, D. 1977, NASA X-685-77-287
- Moore, C.E. 1965, 1967, 1970a, 1970b, 1972, 1975, 1976, 1979, 1980, 1983, *Nat. Bur. Stand. Ref. Data System (NSRDS)*, *Nat. Bur. Stand. (NBS) 3, Sec. 1-10*
- Moore, C.E. 1945, *A Multiplet Table of Astrophysical Interest*, Princeton Obs. Contrib. No. 20 (reprinted 1959, *Nat. Bur. Stand. Technical Note 36*)
- Moore, C.E. 1950, 1952, 1962, *An Ultraviolet Multiplet Table*, *Nat. Bur. Stand. Circular 488, Sec. 1-5*

**File Information:** 1 file, 681 Kbytes**Status:** Has been checked for consistency  
Available in microfiche version  
Documentation in hard copy form only  
Available via network**ADC 6030**

Holmberg, E.B., et al.

**Plate Centers of the European Southern Observatory Sky Survey (1974)****Keywords:** *surveys; plate data*

**Description:** This catalog lists the 606 field centers for the ESO (B) Survey (also called the Quick Blue Survey). For each field are listed field ID, B1950 right ascension (hours and minutes), and

declination (whole degrees) followed by right ascension and declination in radians.

**Reference:**

Holmberg, E.B., Lauberts, A., Schuster, H.-E., and West, R.M. 1974, *A&AS*, 18, 463

**File Information:** 1 file, 30.8 Kbytes

**Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 6033**

Kurucz, R.L.

**A Table of Semiempirical gf Values for Fe II (1981)**

**Keywords:** *abundance; atomic physics*

**Description:** This data set is a listing of the 431933 strongest lines computed using new computations for Slater parameters, eigenvalues, eigenvectors, and scaled Thomas-Fermi-Dirac wavefunction for Fe II. The lines have been sorted by wavelength. Lines with the following properties have been omitted: a)  $\log gf < -9.99$ , b)  $\log gf < -5.00$  when the lower energy is greater than  $30,000 \text{ cm}^{-1}$ , c) lower energy level greater than the ionization energy, and d) wavelength greater than 9999.9999 nm. Vacuum wavelength is given below 200 nm, air above. The file has eight fields that follow the fields in table 7 of the publication: wavelength (in nm),  $\log gf$ , the angular momentum J-0.5, the energy of the even level  $E_{cm-1}$ , the angular momentum of the odd level JP, the energy of the odd level EP, the designation of the lower level ELABL, and the designation of the upper level ELABP. The sign in front of the wavelength is positive if it is included in the selected list of 22547 lines published in the reference. The file format is (F10.4,F6.3,I1,F11.3,I1, F11.3,A8,A2,A8,A2).

**Reference:**

Kurucz, R.L. 1981, SAO Spec. Report No. 390

**File Information:** 1 file, 24.7 Mbytes

**Status:** Has been checked for consistency  
Available via network

**ADC 6034**

Adelman, S.J., et al.

**A Multiplet Table and Finding List for Mn I (1989)**

**Keywords:** *multiplets; finding lists; atomic physics; spectroscopy*

**Description:** This data set contain all known and predicted lines for Mn I. Using the atomic energy levels from Corliss and Sugar (1977), all possible transitions consistent with a change in J of 0, -1, and + 1 were calculated. The transitions included were based on observations from Catalan et al. (1964), Ginter (1978), and Baig et al. (1979) and on predictions based on Catalan et al. (1964) and Kurucz and Peytremann (1975). The form of the table is similar to the form of those published by Moore (1945, 1959), the starting point of this work. Wavelengths are in angstrom and air except below 2000 Å where they are in vacuum. Observed wavelengths were preferred to pre-

dicted values. The laboratory intensities are from Catalan et al. (1964)(A), based on the *gf*-values of Kurucz and Peytremann (1975) using values of Catalan et al. or lines of similar excitation value as a guide (B), Brown and Ginter (1978) but divided by 10 (C), and Baig et al. (1979) (D). For the material taken from Brown and Ginter (1978), the complete designation of the upper state is not given because of lack of space, and some multiplets represent lines with unclassified upper states grouped together for convenience. These include many multiplets between UV2.88 and UV2.343. For material taken from Baig et al. (1979), the complete upper level designation is not given because of lack of space. The ultimate line is 4030.744 Å. Some unclassified lines are given at the end of the table.

#### References:

- Adelman, S.J., Svatek, G.F., Van Wickler, K., and Warren Jr., W.H. 1989, *A&AS*, **80**, 285
- Baig, M.A., Connerade, J.P., and Newson, G.H. 1979, *Proc. R. Soc. London*, A367, 381
- Brown, C.M., and Ginter, M.L. 1978, *J. Opt. Soc. Am.*, 68, 1541
- Catalan, M., Meggers, W.F., and Garcia-Riquelme, O. 1964, *J. Res. Natl. Bur. Stand*, 68A, 9
- Corliss, C., and Sugar, J. 1977, *J. Phys. Chem. Ref. Data*, 6, 1253
- Kurucz, R.L., and Peytremann, E. 1975, *SAO Special Report* 362
- Moore, C.E. 1945, *A Multiplet Table of Astrophysical Interest*, Contributions from Princeton Univ. Obs., No. 20
- Moore, C.E. 1959, *An Ultraviolet Multiplet Table*, Section 1, N.B.S. Circular 488 (Washington: U.S. Government Printing Office)

**File Information:** 2 files, 1.29 Mbytes      **Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 6037**

Murtaugh, F., and Heck, A.

**Annotated Bibliography of Multivariate Statistical Methods in Astronomy (1986)**

**Keywords:** *bibliography*

**Description:** This catalog contains a bibliography of statistical data analysis and pattern recognition algorithms that are multivariate. References to computer packages and books are given. The catalog is divided into nine sections, each with astronomical and general headings, and is offered in two versions,  $\text{\LaTeX}$  and ASCII.

#### Reference:

Murtaugh, F., and Heck, A. 1986, *A&AS*, **68**, 113

**File Information:** 2 files, 230 Kbytes      **Status:** Is distributed as received  
Documentation in hard copy form only  
Available via network

**ADC 6042**

Delporte, E.

**Catalog of Constellation Boundary Data (1930)****Keywords:** *constellations*

**Description:** This catalog permits rapid determination of the constellation in which an object is located from its 1875.0 position. This machine-readable list was compiled by Barry Rappaport using the list of constellation boundaries that was published in 1930 (Delporte 1930). This form made it convenient to manipulate the data into an arrangement that is easier to use for finding a constellation from a position. The southern boundaries of each constellation are listed in order of declination and then by the eastern terminus of each declination arc.

**References:**

Delporte, E. 1930, Cambridge Univ. Press

Roman N.G. 1987, Publication of the Astronomical Society of the Pacific, 99, 695-699

**File Information:** 3 files, 21.3 Kbytes**Status:** Has been checked for consistency  
Available via network**ADC 6043**

EXOSAT Observatory

**EXOSAT Observation Log (1987)****Keywords:** *observatory log; X-ray sources*

**Description:** The *EXOSAT Observation Log* lists archival information on 2108 pointed observations made with the EXOSAT between May 1983 and April 1986. Data listed include start and stop times, instrumental pointings, object names, proposal identifications, principal investigator codes, and observing instruments and modes of observation. The log is intended as a reference to the data collected during the EXOSAT mission and provides the summary information necessary to determine what observations, if any, may be of interest in an investigation.

**References:**

EXOSAT Observatory 1987, ESTEC, Noordwijk, final version

Sternberg, J.R., White, N.E., Barr, P., and Osborne, L. 1986, Noordwijk: ESTEC  
Printingservice, printed version**File Information:** 2 files, 287 Kbytes**Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network**ADC 6044**

Wood, F.B., et al.

**A Finding List for Observers of Interacting Binary Systems, 5th Edition (1980)**

**Keywords:** *eclipsing binaries; orbits of binaries; spectroscopic binaries; finding lists; double and multiple stars*

**Description:** This catalog is abstracted from the Card Catalog maintained at the University of Florida containing information on all published, and to the extent available, unpublished work on eclipsing binaries. The fifth edition differs from the previous ones in the extension of the magnitude limit at maximum light from 13 to 15. The catalog fields are Finding List number; star name; position (equinox 1900); blue magnitude at maximum light; bandpass of maximum light; depth of primary minimum in same bandpass; bandpass primary minimum; depth of secondary minimum and its bandpass; spectral class of star eclipsed at primary light and optional uncertainty character; spectral class of star eclipsed at secondary light; most recent reliable epoch of primary minimum; most recent orbital period; duration of primary minimum; duration of totality of primary minimum; *BD*, *CoD*, *CpD*, and *HD* number; alternate designations of system; and codes indicating the nature of the system.

**References:**

- Wood, F.B., Oliver, J.P., Florkowski, D.R., and Koch, R.H. 1980, Publ. Dept. of Astron., Univ. of Florida, Vol. I  
 Wood, F.B., Oliver, J.P., Florkowski, D.R., and Koch, R.H. 1980, Publ. Univ. Pennsylvania, Astron. Ser., Vol. XII

**File Information:** 3 files, 1.30 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 6045**

Heck, A.

**Bibliographical Catalogue of Field RR Lyrae Stars (1988)**

**Keywords:** *bibliography; variable stars*

**Description:** This catalog is a successor to that of Heck and Lakaye (1977), which was compiled for new studies of the correlation between luminosity, period, and metallicity in RR Lyrae stars. Data were compiled from machine versions of the *General Catalogue of Variable Stars (GCVS)*, 4th ed., and the sixty-seventh (Kholopov et al. 1985) and sixty-eighth (Kholopov et al. 1987) nominating lists, plus manual selection of some other stars from the literature. The bibliographical references were then assembled from the SIMBAD data base through the end of 1987 with additional references being taken from Heck and Lakaye (1977). The catalog contains 11 files. In addition to a descriptive file and the bibliography, there are star-list, cross-index, reference, statistics, author index, and two appendix files. The latter contain stars in the Heck and Lakaye (1977) catalog that are not in this one and vice versa. Stars in the main information file are identified by their variable names. Reference numbers having corresponding entries in the reference file follow.

**References:**

Heck, A. 1988, CDS Bull. No. 34, p. 137

Heck, A., and Lakaye, J.M. 1977, A&AS, 30, 397

Kholopov, P.N., Samus', N.N., Kazarovets, E.V., and Kireeva, N.N. 1987, Inform. Bull. Variable Stars No. 3058

Kholopov, P.N., Samus', N.N., Kazarovets, E.V., and Perova, N.B. 1985, Inform. Bull. Variable Stars No. 2681

**File Information:** 11 files, 999 Kbytes      **Status:** Is distributed as received  
Available via network

**ADC 6046**

McAlister, H.A., and Hartkopf, W.I.

**Second Catalog of Interferometric Measurements of Binary Stars (1988)**

**Keywords:** *spectroscopic binaries; interferometry; double and multiple stars*

**Description:** The catalog is a compilation of measurements of binary and multiple star system obtained by speckle interferometric techniques before October 1988. This version is an updated and expanded version of the first edition of the catalog published in 1985. Stars that have been examined for multiplicity with negative results are included in which case upper limits for the separations are given. Although the primary data of the catalog are observed, separations and position angles and bibliographical references, ancillary data such as alternate identifications, and a set of cross-index files arranged by various major catalog designations are included.

**Reference:**

McAlister, H.A., and Hartkopf, W.I. 1988, Center for High Resolution Angular Astronomy, Georgia State Univ., CHARA Contrib. No. 2

**File Information:** 14 files, 1.73 Mbytes      **Status:** Has been checked for consistency  
Available via network  
Available on CD-ROM  
Full documentation available

**ADC 6049**

Davenhall, A.C., and Leggett, S.K.

**Catalogue of Constellation Boundary Data (1989)**

**Keywords:** *constellations*

**Description:** A computer readable catalog of constellation boundary data is presented in a form suitable for the construction of star charts and atlases. Two data files are available, one for equator and equinox 1875 and the other for equator and equinox 2000. In addition to the data files a documentation file is available that includes a table listing the abbreviations used for the constellations. The present catalog of constellation boundary data is complementary to that of Roman (1987). Roman's catalog should be used to determine in which constellation an object lies. The present catalog is more suited to the construction of star charts and atlases. Both catalogs were based on Delporte

(1930).

**References:**

Davenhall, A.C., and Leggett, S.K. 1989

Delporte, E. 1930, *Delimitation Scientifique des Constellations* (Cambridge: Cambridge University Press)

Roman, N.G. 1987, *PASP*, 99, 695

**File Information:** 5 files, 467 Kbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Description for machine version

**ADC 6052**

Rössiger, S.

**Bibliographic Catalogue of Variable Stars (BCVS), 2nd Supplement (1992)**

**Keywords:** *bibliography; variable stars*

**Description:** This catalog is a supplement to the *Bibliographic Catalogue of Variable Stars (BCVS)* (Wenzel 1981). For each named variable the bibliographic references from 1982 up to 1990 are given (as far as has been possible). Some data from before 1982 are present that had not been included in the *BCVS*. This supplement also includes references for all variable stars that are newly named (name lists No. 67, 68, 69 of the IAU). The fields in the catalog are name of the variable star, year of publication, author's name, name of publication, volume and page numbers, and keywords. The catalog consists of three files. The first file is the main data, the second file is a list of abbreviations used for the journals, and the third file is a list of codes used for the keywords with their meanings.

**References:**

Rössiger, S. 1992, *Zentralinstitut für Astrophysik*

Wenzel, W. 1981, *CDS Bull.* No. 20, p. 105

**File Information:** 4 files, 7.91 Mbytes      **Status:** Has been checked for consistency  
 Available via network

**ADC 6054**

Dorman, B.

**Horizontal Branch Stellar Model Calculations (1992)**

**Keywords:** *[Fe/H] abundances; isochrones*

**Description:** This data set consists of evolutionary sequences from the Zero Age Horizontal Branch (ZAHB) to the point where  $\log L/L_{\text{sun}}$  reaches 2.25 on the lower AGB. These calculations have enhanced oxygen abundance according to a relation used by Vandenberg (1992) and Bergbusch and Vandenberg (1992) for main sequence and red-giant branch models. Also, zero age sequences for oxygen enhanced and scaled-solar compositions are given.

**References:**

- Dorman, B. 1992, *ApJS*, **81**, 221  
 VandenBerg, D.A. 1992, *ApJ*, 391, 685  
 Bergbusch, P.A., VandenBerg, D.A. 1992, *ApJS*, 81, 163

**File Information:** 14 files, 574 Kbytes      **Status:** Has been checked for consistency  
 Available via network  
 Description for machine version

**ADC 6906A**

Brotzman, L.E., and Gessner, S.E.

**ADC CD-ROM, Selected Astronomical Catalogs, Volume I (1991)**

**Keywords:** *optical media, CD-ROM*

**Description:** The ADC CD-ROM, *Selected Astronomical Catalogs, Volume I*, contains 114 of the most often requested and scientifically useful astronomical catalogs in the ADC archives, including several significant new releases, such as the *Astrographic Catalog Reference Stars* (Corbin and Urban 1991), *IRAS Faint Source Catalog*, Version 2.0 (IPAC 1990), and preliminary versions of the *General Catalog of Trigonometric Stellar Parallaxes* (van Altena et al. 1991), the *Catalog of Nearby Stars* (Gliese et al. 1991), and the *Fifth Edition of The Bright Star Catalog* (Hoffliet and Warren 1991), which were prepared especially for this CD-ROM release.

The catalogs appearing on the ADC CD-ROM were chosen with the cooperation of the astronomical data centers in China, France, Germany, Japan, and the U.S.S.R. The International Astronomical Union has lent valuable support in the form of a grant to defray costs of distributing the data to small institutions in developing countries that might otherwise have difficulty in acquiring and using such large volumes of data.

One disc in the two-disc set contains flat ASCII text file versions of the catalogs while the other contains the same data in FITS table format. Software is available from the ADC for browsing through the FITS-formatted data sets. The FITS Table Browser can read standard FITS tables and select fields to display by name, filter records by boolean comparisons of field values, and extract selected fields into text files.

Computer-readable documentation is included with each catalog in the form of printable ASCII text files and, for some catalogs, as  $\LaTeX$ input files. In preparation for the CD-ROM, all catalogs were inspected and certain fields, such as object names and coordinates, have been reformatted for more homogeneity between data sets. For instance, all *Durchmusterung* catalog identifiers have been placed in a single uniform format. The FITS table headers were constructed such that field identifiers and physical units (TTYPER and TUNIT keywords, respectively) are consistent for all catalogs.

A complete listing of all catalogs appearing on the ADC CD-ROM can be obtained under service 5 of category 1 under NODIS, "CD-ROMs Available at NSSDC," or by anonymous FTP to host HYPATIA.GSFC.NASA.GOV, in directory /pub/cdrom, file adc\_cdrom.txt. This file can also be

delivered by E-mail by sending a request via E-mail to LISTSERV@HYPATIA.GSFC.NASA.GOV. In the body of the request (not the subject line), put the following only:

GET PUB ADC\_CDROM.TXT

The file will be sent automatically. LISTSERV is an automated mail delivery system. Therefore, if any other text than the exact request listed above is entered, an error will occur.

**Reference:**

**Brotzman, L.E., and Gessner, S.E. 1991, Astronomical Data Center**

**File Information:** 2 CD-ROM discs      **Status:** Has been checked for consistency  
Available on CD-ROM  
Full documentation available

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## 3.7 Nonstellar and Extended Objects

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**ADC 7001B**

**Sulentic, J.W., and Tift, W.G.**

**Revised New General Catalogue of Nonstellar Astronomical Objects (1973)**

**Keywords:** *nonstellar objects; galaxy catalogs*

**Description:** The catalog is a modern, revised, and expanded version of the original *NGC* (Dreyer 1888). In addition to incorporating the many corrections to the *NGC* found over the years, each object was verified on *Palomar Observatory Sky Survey (POSS)* prints and on plates for southern objects specifically taken for the purpose (although about 90 southern objects could not be verified). POSS objects are tied to the prints where possible by inclusion of rectangular coordinates measured on the prints. New object descriptions are provided for the objects examined during the course of the work. Each logical record of the machine version contains data for a single object. The data include letter designations for anonymous sources near *NGC* objects, coded object type, B1975 positions, galactic coordinates, POSS rectangular coordinates, magnitude and source, object descriptions (original and POSS), and cross references to major specialized catalogs.

**References:**

**Sulentic, J.W., and Tift, W.G. 1973, Univ. of Arizona Press**

Dreyer, J.L.E. 1888, *New General Catalogue of Nebulae and Clusters of Stars*, MNRAS, 49, Part I (reprinted 1962, London: Royal Astronomical Society)

**File Information:** 5 files, 1.04 Mbytes      **Status:** Has been checked for consistency  
Available via network  
Available on CD-ROM  
Full documentation available

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**ADC 7004A**

Abell, G.O.

**Catalogue of Abell and Zwicky Clusters of Galaxies (1958)****Keywords:** *clusters of galaxies*

**Description:** The catalog was originally prepared at the Bulgarian Academy of Sciences. The Abell clusters are rich, compact clusters of galaxies identified by Abell (1958). These clusters were identified on the red plates of the *Palomar Observatory Sky Survey (POSS)*. The Zwicky clusters were identified by Zwicky et al. (1961-68) in 506 POSS fields. They are rich clusters, each having at least 50 members within 3 mag of the brightest member. The catalog includes cluster identification, several coordinate systems, magnitude of the tenth brightest cluster member, distance groups, richness groups, size, mean apparent population, and distance.

**References:**Abell, G.O. 1958, *ApJS*, 3, 211Corwin Jr., H.G. 1974, *AJ*, 79, 1356Kalinov, M., Stavrev, K., and Kaneva, I. 1975, *AZh*, 1, No. 2, 7Zwicky, F., Herzog, E., Wild, P., Karpowicz, M., and Kowal, C.T. 1961-68, *Catalogue of Galaxies and of Clusters of Galaxies*, 6 volumes, (Pasadena: California Institute of Technology)**File Information:** 4 files, 2.65 Mbytes**Status:** Has been checked for consistency  
Available via network  
Available on CD-ROM  
Full documentation available

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**ADC 7005A**

Alter, G., Ruprecht, J., and Vanýsek, V.

**Catalogue of Star Clusters and Associations (1970)****Keywords:** *stellar associations; open clusters*

**Description:** The catalog is a selection of data on all open clusters extracted from the second, considerably enlarged edition of the *Catalogue of Star Clusters and Associations* edited by Alter, Balázs, and Ruprecht (1970), which includes four parts: Part 1: 1039 open clusters, five moving clusters, and 11 stellar groups; Part 2: 70 OB associations; Part 3: 125 globular clusters; Part 4: 28 extragalactic objects. The catalog includes galactic and equatorial coordinates, name, classification, angular diameter, distance, magnitude and spectral types of the brightest stars, total magnitude, and color excess.

**References:**

Alter, G., Ruprecht, J., and Vanýsek, V. 1970

Kluke, J., Moffat, A.F.J., Schmidt-Kaler, Th., and Vogt, N. 1975, prepared selected data from original catalog

Alter, G., Balázs, B., and Ruprecht, J. 1970, Catalogue of Star Clusters and Associations, 2nd Edition, Akademiai Kiada Budapest, printed in Hungary (card form)

**File Information:** 2 files, 257 Kbytes

**Status:** Has been checked for consistency

Available via network

Available on CD-ROM

Description for machine version

**ADC 7006**

Eichendorf, W., and Reinhardt, M.

**Catalogue of Polarization Measurements and Related Data of Extragalactic Radio Sources (1980)**

**Keywords:** *polarization; radio galaxies; redshifts; galaxy catalogs*

**Description:** The catalog contains 510 extragalactic radio sources and covers all polarization measurements from 1965 to the middle of 1974 and a few other radio and optical data for these sources. The typical observation error was in the range of 1-2% in 1965 and 0.5-1% in 1974. The selection criterion for sources was that polarization data should be available at least at three wavelengths for each source. This reduced the sample to 510 sources. The catalog includes observational data: classifications, Cambridge numbers, coordinates, degrees of polarization at various wavelengths, polarization angles at each wavelength, largest angular diameters, position angles, and redshifts. The catalog also includes derived data: rotation measures, linear source diameters, polarization angles at wavelength 0 cm, differences between position angle and polarization angle at 0 cm, spectral indices between each pair of successive wavelengths observed, and polarization indices between each pair of successive wavelengths observed.

**Reference:**

Eichendorf, W., and Reinhardt, M. 1980, *Acta Cosmologica* 9, 7-48

**File Information:** 4 files, 187 Kbytes

**Status:** Has been checked for consistency

Documentation in hard copy form only

Available via network

**ADC 7007**

Lynds, B.T.

**Catalogue of Dark Nebulae (1962)**

**Keywords:** *nebulae*

**Description:** This catalog is an updated version from the published version. The catalog was based on the red and blue prints of the *National Geographic - Palomar Observatory Sky Atlas*. The

catalog contains positions, both equatorial and galactic for the centers of dark nebulae. Values for the cloud sizes are given in square degrees, and estimates of their opacity are given. The updated catalog is ordered by galactic longitude and includes cross references to the published catalog and Barnard Object numbers associated with the clouds.

**Reference:**

Lynds, B.T. 1962, ApJS, 7, 1

**File Information:** 2 files, 178 Kbytes      **Status:** Has been checked for consistency  
 Available in microform versions  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 7008**

Seiradakis, J.H.

**Pulsar Catalogue (1976)**

**Keywords:** *pulsars; radio sources*

**Description:** The *Pulsar Catalogue* lists for each entry B1950.0 coordinates, the period in microseconds, the Julian day of period observation, the period derivative in nanoseconds/day, the dispersion measure, the rotation measure, code for references of right ascension, declination, period, period derivative, dispersion and rotation measures, error in right ascension, declination, period, period derivative, dispersion measure, and rotation measure. A machine-readable version of the references is not available.

**Reference:**

Seiradakis, J.H. 1976, unpublished

**File Information:** 1 file, 21.4 Kbytes      **Status:** Has been checked for consistency  
 Documentation in hard copy form only  
 Available via network

**ADC 7009**

Lynds, B.T.

**Catalogue of Bright Nebulae (1965)**

**Keywords:** *nebulae*

**Description:** The *Catalogue of Bright Nebulae* lists the new galactic and equatorial coordinates of the center of the cloud, the dimensions of the nebulae as measured on the photograph on which it appeared at its brightest, the area of nebulosity in square degrees, color as compared between the blue and red Palomar plates, a brightness index on a scale of 6, an identification number that indicates the complexity of the nebulosity, and a cross reference to the *New General Catalogue, Index Catalogue, Sharpless (1959) Catalogue of HII Regions, Cederblad (1956) Catalogue of Diffuse Galactic Nebulae,*

and Dorschner and Gurtler (1963).

**References:**

- Lynds, B.T. 1965, *ApJS*, **12**, 163  
 Cederblad, S. 1956, *Medd. Lund, Ser. 2*, No. 119  
 Sharpless, S. 1959, *ApJS*, **6**, 257  
 Dorschner, J., and Gurtler, J. 1963, *AN*, **287**, 257

**File Information:** 2 files, 118 Kbytes      **Status:** Has been checked for consistency  
 Available in microfilm version  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 7013**

Arp, H.C.

**Globular-Cluster Catalog (1965)**

**Keywords:** *globular clusters*

**Description:** This catalog was based on the *Globular Cluster Catalog* published by Halton C. Arp in 1965 as part of a review paper on globular clusters. The review focused on the slightly more than a hundred roughly spherical star clusters that have integrated color indices between  $B-V = 0.6$  and  $0.8$  mag and intrinsic magnitudes between  $M_{bol} = -4$  and  $-10$  mag. They are distributed about the center of the galaxy. Such clusters contain stars that are very old and metal poor. The catalog improves upon the earlier publication by Mrs. Hogg (1959). An estimate of the completeness of the catalog is 98% complete for galactic latitudes above  $b_{II} = 8^\circ$  and 94% complete for low latitudes for concentration classes less than XI. This catalog lists for all 119 clusters the ID and position in decimal degrees. The table was compiled by G. Share/NRL.

**Reference:**

- Arp, H.C. 1965, *Stars and Stellar Systems*, Vol. 5, gen. ed. G.P. Kuiper, eds. A. Blaauw and M. Schmidt, Chapter 19, p. 410.

**File Information:** 1 file, 9.30 Kbytes      **Status:** Has been checked for consistency  
 Documentation in hard copy form only  
 Available via network

**ADC 7014**

Clark, D.H., and Caswell, J.L.

**Galactic Supernova Remnants Catalogue (1976)**

**Keywords:** *supernova remnants*

**Description:** The catalog contains observations for southern galactic supernova remnants (SNRs). The observations were made at 408 MHz with the one-mile cross-shaped radio telescope at the Mo-

Molonglo radio observatory between 1969 December and 1971 June and were made at 5000 MHz with the Parkes 64-m radio telescope between 1968 May and 1973 April. The catalog has two files (two tables in published version). The first file lists the 97 known SNRs south of declination  $+18^\circ$  (i.e., within the scope of the Molonglo survey and gives Molonglo and Parkes observational data where available). For completeness the 23 known SNRs north of declination  $+18^\circ$  are listed in file 2. The catalog includes identifications, the 408-MHz integrated flux densities, mean angular diameters, and surface brightnesses of the SNRs.

**Reference:**

Clark, D.H., and Caswell, J.L. 1976, MNRAS, 174, 267

**File Information:** 2 files, 13.1 Kbytes      **Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 7015**

Ilovaisky, S.A., and Lequeux, J.

**Galactic Supernova Remnants Catalogue (1972)**

**Keywords:** *supernova remnants; radio sources*

**Description:** Radio-frequency absorption line observations of 20 sources were used to calibrate the relation between radio surface brightness and linear diameter. Distances for 116 SNR were derived using the new calibration. The catalog lists galactic longitude and latitude in decimal degrees, source name, flux density (in  $10^{-26} \text{ W m}^{-2} \text{ Hz}^{-1}$ ) at 1 GHz, mean angular diameter of the source (arcmin), surface brightness at 1 GHz, diameter of the remnant (pc), distance of the remnant (kpc), scale height from the galactic plane (pc), radial distance to the center (kpc), and references (by number given in the original publication).

**Reference:**

Ilovaisky, S.A., and Lequeux, J. 1972, A&A, 18, 169

**File Information:** 1 file, 12.3 Kbytes      **Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 7016**

de Vaucouleurs, G., and de Vaucouleurs, A.

**Reference Catalogue of Bright Galaxies (1964)**

**Keywords:** *optical galaxies; radio galaxies; galaxy catalogs; references*

**Description:** The *Reference Catalogue of Bright Galaxies* lists for each entry the following information: NGC number, IC number, or A number; A, B, or C designation; B1950.0 positions, position at 100 year precession; galactic and supergalactic positions; revised morphological type and source; type and color class in Yerkes list 1 and 2; Hubble-Sandage type; revised Hubble type according to

Holmberg; logarithm of mean major diameter ( $\log D$ ) and ratio of major to minor diameter ( $\log R$ ) and their weights; logarithm of major diameter; sources of the diameters; David Dunlap Observatory type and luminosity class; Harvard photographic apparent magnitude; weight of V, B-V(0), U-B(0); integrated magnitude B(0) and its weight in the B system; mean surface brightness in magnitude per square minute of arc and sources for the B magnitude; mean B surface brightness derived from corrected Harvard magnitude; the integrated color index in the standard B-V system; "intrinsic" color index; sources of B-V and/or U-B; integrated color in the standard U-B system; observed radial velocity in km/sec; radial velocity corrected for solar motion in km/sec; sources of radial velocities; solar motion correction; and direct photographic source. The catalog was created by concatenating four files side by side.

**Reference:**

de Vaucouleurs, G., and de Vaucouleurs, A. 1964, Univ. of Texas Press, Austin

**File Information:** 1 file, 811 Kbytes

**Status:** Has been checked for consistency

Documentation in hard copy form only

Available via network

**ADC 7018**

Forman, W., et al.

**Fourth UHURU X-Ray Catalogue (1978)**

**Keywords:** *X-ray sources*

**Description:** The *Fourth UHURU X-Ray Catalogue* was put in machine-readable form by Dr. G. Share (NRL) and has not been verified. The catalog lists the source name, B1950.0 position in decimal degrees, the X-ray intensity observed by the UHURU satellite (where applicable in units of given detector).

**Reference:**

Forman, W., Jones, C., Cominsky, L., Julien, P., Murray, S., Peters, G., Tananbaum, H., and Giacconi, R. 1978, *ApJS*, 38, 357

**File Information:** 2 files, 52.7 Kbytes

**Status:** Has been checked for consistency

Available via network

Available on CD-ROM

Full documentation available

**ADC 7020**

Sharpless, S.

**A Catalogue of H II Regions (1959)**

**Keywords:** *H II regions; nebulae*

**Description:** This catalog describes the positions, maximum angular diameters, classifications according to form, structure, and brightness, and the number of associated stars as identified in the

published version of the catalog of galactic H II regions. The catalog discriminates what constitutes a separate H II region on the basis of excitation by hot stars. The positional data include those from the publication (based on the Lund pole at 1900 equatorial coordinates) and epoch 1860 and B1950 coordinates, which were added to this version.

**Reference:**

Sharpless, S. 1959, *ApJS*, 4, 257

**File Information:** 2 files, 54.7 Kbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 7021**

van den Bergh, S.

**Catalogue of Reflection Nebulae (1966)**

**Keywords:** *nebulae*

**Description:** This catalog lists for each entry the van den Bergh catalog number, the Bonn or *Córdoba Durchmusterung* number, the *HD* number, galactic position, spectral type, V magnitude, type I (embedded star) or type II, a code for the surface brightness on the *Palomar Sky Survey*, codes for the colors, code indicating the strength of the absorption in the field containing the reflection nebula, and maximum radii observed on the blue and red prints of the *Palomar Sky Survey*.

**Reference:**

van den Bergh, S. 1966, *AJ*, 71, 990

**File Information:** 2 files, 46.5 Kbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 7023**

Ellis, R., and Phillipps, S.

**A Catalogue of Absorption Lines in QSO Spectra (1978)**

**Keywords:** *QSOs; spectroscopy*

**Description:** The catalog is a collection of spectral data for 128 quasi-stellar objects (QSO). The data have been assembled from the catalogs of de Veny et al. (1971), Smith-Haenni (1977), and Burbidge et al. (1977). To ensure every observation is recorded and to search for new or omitted results, the entire literature up to September 1977 was scanned. The catalog distributed by the ADC is an updated version of the original catalog published as microfiche in Ellis and Phillipps (1978). The catalog includes object names, positions and identifications, V, B-V, U-B, emission redshifts, observation references, analyses, and line lists.

**Reference:**

Ellis, R., and Phillipps, S. 1978, MNRAS, 183, 271

**File Information:** 2 files, 417 Kbytes

**Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 7024A**

Acker, A., Marcout, J., and Ochsenbein, F.

**Strasbourg Catalog of Galactic Planetary Nebulae (1980)**

**Keywords:** *planetary nebulae*

**Description:** The catalog provides a list of data concerning all known planetary nebulae. The total number is 1455, including 1036 listed in the Perek and Kohoutek (PK) catalog (1967) and including doubtful cases. The additions come from Sanduleak (1975, 1976), Acker and Marcout (1977), Weinberger (1977), Peterson (1977), Kohoutek (1978), Stephenson (1978), Allen (1979), Murdin et al. (1979), van den Bergh (1979), and Purgathofer and Weinberger (1980). The catalog includes PK numbers, equatorial coordinates, visual magnitudes, angular sizes, mean radial velocities, magnitudes of central star, and expansion velocities of the planetary nebulae.

**References:**

Acker, A., Marcout, J., and Ochsenbein, F. 1980, CDS Bull. No. 18, p. 84

Acker, A., and Marcout, J. 1977, A&AS, 30, 217

Allen, D.A. 1979, Observatory, 99, 83

Kohoutek, L. 1978, in IAU Symposium 76, ed. Y. Terzian (Dordrecht: Reidel)

Murdin, P., Clarck., D.H., and Haynes, R.F. 1979, MNRAS, 189, 459

Perek, L., Kohoutek, L. 1967, Catalogue of Planetary Nebulae (Praha: Czechoslovak Acad. of Sciences)

Peterson, A.W. 1977, PASP, 89, 129

Purgathofer, A., and Weinberger, R. 1980, A&A, 87, L5

Sanduleak, N. 1975, Publ. Warner Swasey Obs., 2, No. 1

Sanduleak, N. 1976, Publ. Warner Swasey Obs., 2, No. 3

Stephenson, C.B. 1978, PASP, 90, 396

van den Bergh, S. 1979, ApJ, 227, 497

Weinberger, R. 1977, A&AS, 30, 335

**File Information:** 2 files, 108 Kbytes

**Status:** Has been checked for consistency  
Available via network  
Available on CD-ROM  
Full documentation available

**ADC 7026B**

Nilson, P.

**Uppsala General Catalogue of Galaxies (1973)**

**Keywords:** *galaxy catalogs*

**Description:** The catalog is an essentially complete compilation of galaxies to a limiting apparent magnitude of 14.5 on the blue prints of the *Palomar Observatory Sky Survey (POSS)*. Coverage is limited to the sky north of declination  $+02^{\circ}30'$ . Galaxies smaller than 1.0' in diameter and brighter than 14.5 mag may be included from the *Catalogue of Galaxies and of Clusters of Galaxies (CGCG)*, Zwicky et al. 1961-1968); all such galaxies in the *CGCG* are included in the *UGC*. The galaxies are ordered by 1950 right ascension. The catalog includes cross identifications to the *UCM* (Nilson 1973) and the *Morphological Catalogue of Galaxies* (Vorontsov-Velyaminov et al. 1962-1964), equatorial coordinates for B1950.0, sizes of galaxies as measured on the *POSS* blue and red prints, position angles, classifications in the Hubble system, photographic magnitudes, radial velocities, and inclinations.

**References:**

Nilson, P. 1973, *Uppsala Ann.* 6

Zwicky, F., Herzog, E., Wild, P., Karpowicz, M., and Kowal C.T. 1961-68, *Catalogue of Galaxies and of Clusters of Galaxies, I-VI* (Pasadena: California Institute of Technology)

Vorontsov-Velyaminov, B.A., and Krasnogorskaya, A.A. 1962, Vol. I., *Trudy Gos. Astron. Inst. Shternberga*, 32

Vorontsov-Velyaminov, B.A., and Arhipova, V.P. 1964, Vol. II. (Moscow: U.S.S.R.)

Vorontsov-Velyaminov, B.A., and Arhipova, V.P. 1963, Vol. III., *Trudy Gos. Astron. Inst. Shternberga*, 33

**File Information:** 2 files, 978 Kbytes

**Status:** Has been checked for consistency

Available via network

Available on CD-ROM

Full documentation available

**ADC 7028**

Duus, A., and Newell, E.B.

**Southern Groups and Clusters of Galaxies (1977)**

**Keywords:** *clusters of galaxies*

**Description:** The catalog is the result of a survey of film copies of the ESO B plates for southern clusters of galaxies. Because of the varying quality of the ESO films and the scattered placement of the fields searched, the present survey is not intended for use in statistical studies. Nevertheless, the clusters and groups are listed from a representative sample of nearby to distant systems that is spread across the southern sky. The catalog contains the cluster identification number based on a right ascension, declination numbering scheme; the ESO field number (see ADC catalog 6030); position of cluster center on plate (in mm); concentration class type of cluster; estimate of the number of galaxies; asterisk for uncertainty assignment previous value; distance class; and previous designations.

**Reference:**

Duus, A., and Newell, E.B. 1977, *ApJS*, 35, 209

**File Information:** 1 file, 75.0 Kbytes      **Status:** Has been checked for consistency  
 Documentation in hard copy form only  
 Available via network

**ADC 7031A**

Ruprecht, J., Balázs, B., and White, R.E.

**Catalogue of Star Clusters and Associations, Supplement 1, Associations (1981)**

**Keywords:** *bibliography; stellar associations*

**Description:** The catalog contains data and bibliographical citations for all 70 associations of the second edition of the *Catalogue of Star Clusters and Associations (CSCA)* edited by Alter et al. (1970) which includes data for open clusters, associations, globular clusters and extragalactic objects up to 1967, and *Supplement to the CSCA* by Ruprecht et al. (1982), which contains the supplementary data up to the end of 1973. Thus, the literature is covered through 1973. The catalog includes the years of the literature, references, authors, abbreviated journal references, diameters, distances and color indices of the associations, number of stars and spectral types of the stars in the associations, and identification of the *Palomar Observatory Sky Survey Chart* on which the association appears.

**References:**

Ruprecht, J., Balázs, B., and White, R.E. 1981, *Akademiai Kiado, Publ. House Hungarian Acad. Sciences, Budapest*

Alter, G., Balázs, B., and Ruprecht, J., 1970, *Catalogue of Stellar Clusters and Associations*, 2nd edition, *Akademiai Kiada, Budapest*, printed in Hungary

**File Information:** 2 files, 433 Kbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Description for machine version

**ADC 7034A**

Lauberts, A.

**The ESO/Uppsala Survey of the ESO(B) Atlas (1982)**

**Keywords:** *surveys; nonstellar objects; atlases; galaxy catalogs*

**Description:** The survey is a joint project undertaken by the European Southern Observatory (ESO) and the Uppsala Observatory to provide a systematic and homogeneous search of the *ESO(B) Atlas* (also known as the Quick Blue Survey). The *ESO(B) Atlas*, taken with the ESO 1-m Schmidt telescope at La Silla, Chile, covers 606 fields from  $-90^\circ$  to  $-20^\circ$  of declination. The fields are similar in size and scale to those of the *Palomar Observatory Sky Survey*. Unsensitized IIA-O plates and a 2-mm GG385 filter were used to give a passband similar to the Johnson B color. The actual search was conducted at the Uppsala Observatory and resulted in a list of nonstellar objects including all NGC and IC galaxies between  $-20^\circ$  and  $-30^\circ$  declination, all galaxies down to a limiting diameter of  $1.0'$ , all disturbed galaxies as faint as possible, all star clusters in the *Catalog of Star Clusters and*

*Associations* (Alter et al. 1970) and smaller and fainter clusters if recognizable and all planetary nebulae listed in the available catalogs. The catalog includes coordinates, identifications, diameters, position angles, morphological types, classifications, magnitudes, colors, and radial velocities.

**References:**

Lauberts, A. 1982, *European Southern Observatory*

Alter, G., Balázs, B., and Ruprecht, J. 1970, *Catalog of Star Clusters and Associations*, 2nd edition, Budapest

**File Information:** 6 files, 3.56 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 7036**

Rood, H.J.

**A Catalog of Galaxy Redshifts**

**Keywords:** *redshifts; galaxy catalogs*

**Description:** The *Catalog of Galaxy Redshifts* was compiled by Dr. Rood to enter the most accurate redshift for each entry in the *Uppsala General Catalog of Galaxies* below 15000 km/sec, plus some fainter galaxies in the fields of rich clusters, plus some southern galaxies. The catalog is 99% complete for declinations north of  $-2^{\circ} 30'$  and blue magnitude ( $m_p$ ) brighter than 13 mag. The catalog was received in 1980. The fields in the catalog are a sequential number in increasing order of right ascension (1-3981); cross reference to the *New General Catalogue, Index Catalogue*, anonymous designations from the *Reference Catalogue of Bright Galaxies, Third Cambridge*, or other identification found from the source material; B1950 positions, blue magnitude ( $m_p$ ); and indicator if redshift from different sources differs much, heliocentric redshift, rms error in the redshift, redshift relative to local group, position in galactic coordinates, and source code.

**Reference:**

Rood, H.J., unpublished

**File Information:** 1 file, 349 Kbytes      **Status:** Has been checked for consistency  
 Available in microfiche version  
 Documentation in hard copy form only  
 Available via network

**ADC 7039A**

Davoust, E., and Pence, W.D.

**Detailed Bibliography on the Surface Photometry of Galaxies (1982)**

**Keywords:** *bibliography; optical galaxies; galaxy catalogs; surface photometry*

**Description:** The catalog is a bibliographical compilation on the surface photometry of external

galaxies. References were gathered over the years, but systematic searches through the *Bibliography on the Structure of Galaxies* (Brosche et al. 1974), Astronomy and Astrophysics Abstracts, Bulletin Signaletique du C.N.R.S. as well as the notes in de Vaucouleurs' first and second galaxy catalogs (*RC1*, *RC2*) ensured completeness. The survey is complete until September 1981. Information on about 650 galaxies is given from more than 300 references. The catalog includes galaxy names, numerical Hubble galaxy types as given in *RC2*, total B magnitudes, methods of observation and reduction, general purpose of the papers, and references.

**References:**

Davoust, E., and Pence, W.D. 1982, *A&A*, Suppl. 49, 631

Brosche, P., Einasto, J., and Rummel, U. 1974, Veröff. Astron. Rechen Inst., Heidelb. No. 26

**File Information:** 4 files, 209 Kbytes

**Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 7042A**

Godwin, J.G., Metcalf, N., and Peach, J.V.

**The Coma Cluster—I. A Catalogue of Magnitudes, Colours, Ellipticities and Position Angles for 6724 Galaxies in the Field of the Coma Cluster (1983)**

**Keywords:** *clusters of galaxies*

**Description:** The catalog contains photometry of 6724 galaxies and probable galaxies in a field of 2.63 square degrees centered on the Coma cluster. The magnitude limit is  $b(26.5) = 21$ . The plates were all taken with the Palomar 48-inch Schmidt telescope during good conditions in May 1976. The rms deviation based on the repeatability of measurements using different scans of the same plates was between 0.12 and 0.2 mag. The catalog includes identifications, positions in the cluster, b- and r-band magnitudes, isophotal radii, (b-r) colors, intensity profiles, ellipticities, and position angles.

**Reference:**

Godwin, J.G., Metcalf, N., and Peach, J.V. 1983, *MNRAS*, 202, 113

**File Information:** 1 file, 682 Kbytes

**Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 7043**

McCammon, D., et al.

**Wisconsin Soft X-Ray Diffuse Background All-Sky Survey (1983)**

**Keywords:** *surveys; X-ray sources*

**Description:** The catalog contains an all-sky survey map of the soft X-ray diffuse background and the count-rate data from which the maps were made for the ten flights included in the survey. It contains 40 files in the machine-readable version and includes documentation and utility subroutines.

The data files contain different band maps (B, C, M, M1, M2, I, J, 2-6 KeV) in a 0 degree-centered Altoff projection, in a 180-degree-centered Aitoff projection, in a north polar projection, and in a south polar projection.

**Reference:**

McCammon, D., Burrows, D.N., Sanders, W.T., and Kraushaar, W.L. 1983, *ApJ*, **269**, 107

**File Information:** 40 files, 11.4 Mbytes      **Status:** Has been checked for consistency  
Available via network  
Description for machine version

**ADC 7044A**

Ruprecht, J., Balázs, B., and White, R.E.

**Catalogue of Star Clusters and Associations. II. Globular Clusters (1981)**

**Keywords:** *globular clusters*

**Description:** The catalog is the complete bibliographical listing for globular clusters from the second edition of the *Catalogue of Star Clusters and Associations (CSCA)* edited by Alter et al. (1970), and the *Supplement to the CSCA* by Ruprecht et al. (1981). Thus, it covers the literature through 1973. The catalog includes running cluster numbers, cluster names, coordinates, identification of the *Palomar Observatory Sky Survey Chart* on which the cluster appears, the literature citations, diameters, distances, color excess, integrated spectral types, radial velocities, and integrated magnitudes of clusters.

**References:**

Ruprecht, J., Balázs, B., and White, R.E. 1981, *Akademiai Kiado, Publ. House Hungarian Acad. Sciences, Budapest*

Alter, G., Balázs, B., and Ruprecht, J. 1970, *Catalog of Star Clusters and Associations*, 2nd edition, Budapest

**File Information:** 2 files, 1.39 Mbytes      **Status:** Has been checked for consistency  
Available via network  
Available on CD-ROM  
Description for machine version

**ADC 7047**

Weedman, D.W.

**Seyfert Galaxies (1977)**

**Keywords:** *Seyfert galaxies; galaxy catalogs*

**Description:** This catalog is a combination of two Seyfert galaxy lists published by Weedman in 1977 and 1978. This version includes 121 objects, 88 from the first published list and 33 from the second. The lists are merged and sorted by right ascension. The criteria for objects to be included

are the same for both lists and are as follows: broad emission lines, non-stellar (nebulous) appearance on *Palomar Sky Survey* prints ("This means in practice that it must have a diameter greater than about 7" for the nebulosity around the nucleus to be visible."), and Seyfert designation in a published reference (no unpublished Seyferts included). Also, the lists omit "galaxies referred to by spectroscopists as probably or possibly being Seyferts unless UBV photometry also showed the characteristic Seyfert colors." (Weedman's italics.) Also, quasars are excluded. In the introduction to the second list, Weedman remarks that four galaxies from the first list were not confirmed spectroscopically as Seyfert (Phillips, M.M., and Osterbrock, D.E. 1977, *Publ. Astr. Soc. Pacific*, 89, 251) and "should be deleted..." However, these have been retained in the machine-readable version in order to conform to the lists as published. These galaxies are as follows: AKN 42, AKN 81, AKN 223, and AKN 253. The catalog lists for each Seyfert designation of object, list reference number, equatorial position and positional accuracy, redshift, angular major axis, B-V and U-B color indices, references to UBV photometry, spectra, and radio data. The second list did not include angular major axis and color indices.

**References:**

- Weedman, D.W. 1977, *ARA&A*, 15, 69  
 Weedman, D.W. 1978, *MNRAS*, 184, 11P

**File Information:** 3 files, 83.6 Kbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 7048**

Cornett, R.H., and Smith, A.M.

**Catalogue of Middle Ultraviolet Photometry of Virgo Cluster Galaxies (1981)**

**Keywords:** *ultraviolet photometry; clusters of galaxies*

**Description:** The catalog contains photographic photometry of Virgo cluster galaxies in a wavelength band extending from 1620 Å to 3200 Å using sounding rocket techniques. The instrumentation was flown on an Astrobe rocket in May 1979. The camera field of view and focal ratio are 11.4° and f/1.4, respectively. The Cs-Te photocathode of the channel plate image intensifier was used with a fused quartz window located near the camera focal plane. The constant energy mean wavelength is 2421 Å and a full-width at half-maximum is 1150 Å. The observational results are middle ultraviolet magnitudes, U(2421), or faint limits for U(2421), for 201 galaxies within 5.5° of the cluster center. The catalog includes identifications, revised Hubble types, Hubble galaxy classifications, B magnitudes, colors, measured fluxes at 2421 Å, and neutral hydrogen data observed in the 21-cm lines.

**References:**

- Cornett, R.H., and Smith, A.M. 1981, *ADC Bull.* 1, 78  
 Smith, A.M., and Cornett, R.H. 1982, *ApJ*, 261, 1

**File Information:** 1 file, 18.5 Kbytes      **Status:** Has been checked for consistency  
 Documentation in hard copy form only  
 Available via network

**ADC 7049**

Zwicky, F., Herzog, E., and Wild, P.

**Catalogue of Galaxies and of Clusters of Galaxies, I-VI (1960)****Keywords:** *galaxy catalogs*

**Description:** The published catalog covers 560 *Palomar Sky Survey* fields; for each field, it lists both individual galaxies and clusters of galaxies. Its limiting magnitude for galaxies is approximately 15.5 apparent photographic magnitude. The present machine-readable version includes only the individual galaxies. The catalog includes field number, equatorial coordinates, and apparent photographic magnitudes.

**References:**

- Zwicky, F., Herzog, E., and Wild, P. 1960, Vol. I (Pasadena: California Institute of Technology)
- Zwicky, F., and Herzog, E. 1963, Vol. II (Pasadena: California Institute of Technology)
- Zwicky, F., and Herzog, E. 1966, Vol. III (Pasadena: California Institute of Technology)
- Zwicky, F., and Herzog, E. 1968, Vol. IV (Pasadena: California Institute of Technology)
- Zwicky, F., Karpowicz, M., and Kowal, C.T. 1965, Vol. V (Pasadena: California Institute of Technology)
- Zwicky, F., and Kowal, C.T. 1968, Vol. VI (Pasadena: California Institute of Technology)

**File Information:** 3 files, 779 Kbytes

**Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 7050**

Blitz, L., Fich, M., and Stark, A.A.

**Carbon Monoxide Observations of Southern Hemisphere H II Regions (1982)****Keywords:** *radial velocities; H II regions; CO; galaxy catalogs*

**Description:** The catalog contains machine-readable versions of the *Catalog of CO Radial Velocities Toward Galactic HII Regions* (Blitz et al. 1982) and the *Catalog of Carbon Monoxide Observations of Southern Hemisphere HII Regions* (Gillespie et al. 1977) in two separate files. The former is a catalog of 242 molecular cloud complexes that are associated with optical HII regions and includes source names, coordinates, CO radial velocities, antenna temperatures and full width at half-maximum at the position of the strongest CO emission, references for the observations, distances to the stars exciting the HII regions, and optical diameters of the HII regions. The latter is the first CO survey of the southern sky; it was made using the Anglo-Australian 3.9-m optical telescope at 115 GHz (2.6-mm wavelength) with a hot-electron bolometer receiver located at the coude focus. The data were collected during two observing periods (September 1975, April 1976) and include designations,

coordinates, median values for the velocities, and distances to the stars exciting the HII regions.

**References:**

Blitz, L., Fich, M., and Stark, A.A. 1982, *ApJS*, 49, 183

Gillespie, A.R., Huggins, P.J., Sollner, T.C.L.G., Phillips, T.G., Gardner, F.F., and Knowles, S.H. 1977, *A&A*, 60, 221

**File Information:** 3 files, 86.9 Kbytes

**Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 7051**

Sandage, A., and Tammann, G.A.

**A Revised Shapley-Ames Catalog of Bright Galaxies (1981)**

**Keywords:** *galaxy catalogs*

**Description:** The catalog is a compilation of available data on redshifts, morphological types, and magnitudes for Shapley-Ames galaxies, using literature sources to summer 1980. The listed types and luminosity classes are new estimates made by Sandage in a consistent way over the short period 1977-1979. The types are based on plates from Mount Wilson, Palomar, Las Campanas, and in a few remaining cases on the Uppsala Schmidt at Mount Stromlo. The types are on the modified Hubble system. The luminosity classes generally follow van den Bergh's precepts. Redshifts are from the literature sources listed in Part III. The magnitudes are on the  $B_r$  system of the *Second Reference Catalog of Bright Galaxies*, obtained by reducing all new data to this system. The catalog includes designations, positions, the Hubble types, luminosity classes, sources of the galaxy types, apparent blue magnitudes, total internal absorptions, weighted mean observed velocities, and miscellaneous information.

**Reference:**

Sandage, A., and Tammann, G.A. 1981, *Carnegie Inst. of Washington Publ.* 635

**File Information:** 2 files, 110 Kbytes

**Status:** Has been checked for consistency  
Available via network  
Available on CD-ROM  
Description for machine version

**ADC 7054**

Véron-Cetty, M.-P., and Véron, P.

**A Catalogue of Extragalactic Radio Source Identifications (1983)**

**Keywords:** *radio sources; radio galaxies; galaxy catalogs*

**Description:** The catalog is a compilation of all published optical identifications of extragalactic radio sources. This machine-readable version is an updated and greatly expanded edition of the original published one; this version contains 14585 identifications and citations to 917 papers. The data

file contains most commonly used source name, number in the 4C catalog Gower et al. (1967), and Pilkington and Scott (1965) if applicable, right ascension and declination (equinox B1950.0), magnitude estimate for the identification type of optical object, identification reference, alternate name for identified object (if known), confirmation or invalidation code and associated reference, finding chart existence (or nonexistence), redshift, and reference for the spectrum. A reference file contains the references ordered by number cited in the catalog and alphabetically by author. Completeness has been attempted for all papers published through the end of 1982. The present version contains fewer references than the 1974 version (which had 935) because certain numbers were free in the previous edition and because certain references are no longer used in the 1983 version and were removed. The authors have prepared this final version and have discontinued future updates.

**References:**

- Véron-Cetty, M.-P., and Véron, P. 1983, *A&AS*, 53, 219  
 Gower, J. F. R., Scott, P. F., and Wills, D. 1967, *MmRAS*, 71, 49  
 Pilkington, J. D. H., and Scott, P. F. 1965, *MmRAS*, 69, 183

**File Information:** 3 files, 1.26 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 7056**

Sarazin, C.L., Rood, H.J., and Struble, M.F.

**A Table of Redshifts for Abell Clusters (1982)****Keywords:** *redshifts; clusters of galaxies*

**Description:** The catalog gives redshifts for 329 Abell clusters, all those known to the authors in published or preprint form at the time of the compilation (through 1982). The data table has been compiled critically, based partially on a number of photometric distance estimators derived from the redshift data. These were used to evaluate probable accuracies of the redshifts and to resolve discrepancies among different values for the same clusters. The catalog includes Abell (1958) cluster numbers, redshifts, and the number of redshifts of different galaxies averaged to determine the cluster value. The machine version was prepared at the Astronomical Data Center, NASA/GSFC.

**References:**

- Sarazin, C.L., Rood, H.J., and Struble, M.F. 1982, *A&A*, 108, L7  
 Abell, G. O. 1958, *ApJS*, 3, 211

**File Information:** 2 files, 14.4 Kbytes      **Status:** Has been checked for consistency  
 Documentation in hard copy form only  
 Available via network

**ADC 7057**

Wesselius, P.R.

**List of Globules Based on 7 Lists by Wesselius (1979)**

**Keywords:** *globules*

**Description:** Wesselius compiled this list based on seven lists. The main list is one in preparation in Australia supplied by Miller Goss, a second list obtained from Bok that he referred to as the *Catalog of Southern Globules, Hartley-Manchester Catalog* (1978); and five other lists from Bok and Cordwell (1973); Martin and Barrett (1978); Bok, Cordwell, and MacCarthy (1974); and Sim (1968a, 1968b). Wesselius notes that this list is not complete in any sense. The fields in the catalog are running number (1-821), name of globule, B1950.0 positions, position in galactic coordinates, approximate angular size, and reference.

**References:**

Wesselius, P.R. 1979

Bok, B.J., and Cordwell, C.S. 1973, *Molecules in the Galactic Environment*, eds., M.A. Gordon, E. Snyder, (New York: John Wiley and Sons Inc.), pp. 82-86

Bok, B.J., Cordwell, C.S., MacCarthy, C. 1974, *AJ*, 79, 43

Martin, R.W., and Barrett, A.H. 1978, *ApJS*, 36, 4

Sim, M.E. 1968a, *Publ. R. Obs., Edinb*, Vol. 6, No. 8, 191

Sim, M.E. 1968b, *Publ. R. Obs., Edinb*, Vol. 6, No. 8, 196-198

**File Information:** 1 file, 51.3 Kbytes

**Status:** Has been checked for consistency

Documentation in hard copy form only

Available via network

**ADC 7058**

Warwick, R.S., et al.

**The Ariel Catalogue of X-Ray Sources (1981)**

**Keywords:** *X-ray sources; surveys*

**Description:** This catalog lists the high and low latitude X-ray sources observed with the Sky Survey Instrument on board the ARIEL 5 satellite (UK 5) as published by Warwick et al. (1981) and McHardy et al. (1981). ARIEL 5 scanned the sky for 5.5 years in the energy bands 2-18 keV with a time resolution of one orbit (100 min approximately). The fields in the catalog list source name and up to three alternative names; the error box center and corners in decimal degrees; average, minimum, and maximum flux and their error; a variability code; identification; and comments.

**References:**

Warwick, R.S., Marshall, N., Fraser, G.W., Watson, M.G., Lawrence, A., Page, C.G.,

Pounds, K.A., Ricketts, M.J., Sims, M.R., and Smith, A. 1981, *MNRAS*, 197, 865

McHardy, I.M., Lawrence, A., Pye, J.P., and Pounds, K.A. 1981, *MNRAS*, 197, 893

**File Information:** 5 files, 125 Kbytes

**Status:** Has been checked for consistency

Available via network

Available on CD-ROM

Description for machine version

**ADC 7061A**

Markarian, B.E.

**Catalogue of Markarian Galaxies (1967)****Keywords:** *Markarian galaxies; galaxy catalogs*

**Description:** Markarian galaxies have a moderate to strong ultraviolet continuum as detected by an objective-prism survey at Byurakan Observatory from 1965 to 1978. The survey was done with a 40-inch Schmidt telescope with a dispersion of 2500 Å/mm at H- $\alpha$ . The catalog contains no galaxies brighter than mag 13.0 or fainter than mag 17.5. The catalog fields are Markarian Identification number; S(eyfert) or Q(uasar) flag; cross identifications to other catalogs; B1950 positions; major and minor axis (arcsec); magnitude and spectral types, including a code for the strength of the UV continuum.

**References:**

- Markarian, B.E. 1967, *Astrofis.* 3, 55  
 Markarian, B.E. 1969, *Astrofis.* 5, 443  
 Markarian, B.E. 1969, *Astrofis.* 5, 581  
 Markarian, B.E., and Lipovetskii, V.A. 1971, *Astrofis.* 7, 511  
 Markarian, B.E., and Lipovetskii, V.A. 1972, *Astrofis.* 8, 155  
 Markarian, B.E., and Lipovetskii, V.A. 1973, *Astrofis.* 9, 487  
 Markarian, B.E., and Lipovetskii, V.A. 1974, *Astrofis.* 10, 307  
 Markarian, B.E., and Lipovetskii, V.A. 1976, *Astrofis.* 12, 389  
 Markarian, B.E., and Lipovetskii, V.A. 1976, *Astrofis.* 12, 657  
 Markarian, B.E., Lipovetskii, V.A., and Stepanian, D.A. 1977, *Astrofis.* 13, 225  
 Markarian, B.E., Lipovetskii, V.A., and Stepanian, D.A. 1977, *Astrofis.* 13, 397  
 Markarian, B.E., Lipovetskii, V.A., and Stepanian, D.A. 1979, *Astrofis.* 15, 201  
 Markarian, B.E., Lipovetskii, V.A., and Stepanian, D.A. 1979, *Astrofis.* 15, 363  
 Markarian, B.E., Lipovetskii, V.A., and Stepanian, D.A. 1979, *Astrofis.* 15, 549  
 Markarian, B.E., Lipovetskii, V.A., and Stepanian, D.A. 1981, *Astrofis.* 17, 619

**File Information:** 3 files, 231 Kbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 7062**

Vorontsov-Velyaminov, B.A., and Krasnogorskaya, A.A.

**Morphological Catalog of Galaxies (1962)****Keywords:** *galaxy catalogs*

**Description:** The catalog is a compilation of information for approximately 34000 galaxies found and examined on the *Palomar Observatory Sky Survey (POSS)*. Individual identifiers are assigned for about 29000 galaxies and information on the remaining 5000 is present in the extensive notes of the published catalogs (Vorontsov-Velyaminov et al. 1962-1968). The catalog is structured according

to the *POSS* zones, counting from the equator, and is numbered from +15 (corresponding to +90°) to +01 (+06° zone) and +00 (equatorial zone) to -05 (-30° zone); the fields are numbered with increasing right ascension. The catalog includes cross identifications to the *NGC* (Dreyer 1888) and *IC* (Dreyer 1895, 1908) catalogs, equatorial coordinates for B1950.0, magnitudes, estimated sizes and intensities of the brighter inner region and the entire object, and estimated inclinations.

#### References:

- Vorontsov-Velyaminov, B.A., and Krasnogorskaya, A.A. 1962, Vol. I., *Trudy Gos. Astron. Inst. Shternberga*, 32
- Vorontsov-Velyaminov, B.A., and Arhipova, V.P. 1964, Vol. II. (Moscow, U.S.S.R.)
- Vorontsov-Velyaminov, B.A., and Arhipova, V.P. 1963, Vol. III., *Trudy Gos. Astron. Inst. Shternberga*, 33
- Vorontsov-Velyaminov, B.A., and Arhipova, V.P. 1968, Vol. IV., *Trudy. Gos. Astron. Inst. Shternberga*, 38
- Dreyer, J.L.E. 1888, *New General Catalogue of Nebulae and Clusters of Stars*, *MmRAS Soc.* 49, Part I (reprinted 1962, London: Royal Astronomical Society)
- Dreyer, J.L.E. 1895, *Index Catalogue of Nebulae found in the Years 1888-1894, with Notes and Corrections to the New General Catalogue*, *MmRAS Soc.* 51, 185 (reprinted 1962, London: Royal Astronomical Society)
- Dreyer, J.L.E. 1908, *Second Index Catalogue of Nebulae and Clusters of Stars, containing Objects found in the years 1895-1907, with Notes and Corrections to the New General Catalogue and to the Index Catalogue for 1888-1894*, *MmRAS Soc.* 59, Part 2, 105 (reprinted 1962, London: Royal Astronomical Society)

**File Information:** 2 files, 1.83 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Full documentation available

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**ADC 7063**

Mitchell, K.J., et al.

### A List of Ultraviolet Excess Galaxies (1982)

**Keywords:** *ultraviolet photometry; galaxy catalogs*

**Description:** The catalog contains a list of 412 faint galaxies selected for their apparent ultraviolet excess. The galaxies were selected from a three-color (UBV) plate taken with the Palomar 48-inch Schmidt telescope. The 14-inch-square plates cover an area of 30 square degrees centered on Kapteyn Selected Area 28. The catalog includes running numbers, coordinates, color codes, magnitude codes, morphologies, diameters, and notes.

#### Reference:

- Mitchell, K.J., Brotzman, L.E., Warnock III, A., and Usher, P.D. 1982, *Ap&SS*, 88, 219

**File Information:** 1 file, 18.5 Kbytes**Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

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**ADC 7064****Verter, F.****Catalog of CO Observations of Galaxies (1985)****Keywords:** *bibliography; CO; galaxy catalogs; references*

**Description:** The catalog is a complete summary of all observations of CO isotopes in galaxies up to spring 1984. It consists of seven tables. Table 1 describes the reference for CO observations of galaxies. Table 2 describes the properties of the telescopes used for observations. Table 3 consists of two files that contain a compilation of data on galaxies that have been observed in CO. Most of the characteristics listed here are observed properties. The detected galaxies are listed first, followed by galaxies with upper limits. Upper limits are given for detected galaxies if the detection is disputed or if the limits refer to transitions or regions that have not yet been detected. Table 4 is a comparison of the antenna temperature scales used in the references in this catalog. Table 5 lists the coverage, resolution, observed structure of CO maps of galaxies, and notes to tables 4 and 5.

**Reference:**Verter, F. 1985, *ApJS*, 57, 261**File Information:** 7 files, 99.4 Kbytes**Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

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**ADC 7068A****Feitzinger, J.V., and Stüwe, J.A.****Catalogue of Dark Nebulae and Globules for Galactic Longitudes 240 Degrees to 360 Degrees (1984)****Keywords:** *nebulae; globules*

**Description:** The catalog is a compilation of data resulting from a study of the *European Southern Observatory Quick Blue Survey (ESO(b))* and *SRC-J Sky Atlas* for dark nebulae and globules between galactic longitudes 240° and 360°. The European Southern Observatory has undertaken to survey the southern sky from declination -90° to -20° with its 100/162/305-cm Schmidt telescope at La Silla, Chile. This survey is referred to as the *ESO(b)* or sometimes as the *ESO Quick Blue Survey*. A survey is underway using unbaked IIA-O plates with a 2-mm GG 385 Schott filter. This catalog closes the great southern gap open since the work of Lynds (1962) for the Northern Hemisphere. The catalog is divided into one file for the dark nebulae, a second file for the globules, and a third file for a 500 x 1400-pixel image of the survey area. The catalog includes positions in both equatorial and galactic coordinates, size, opacity, morphological classification, and cross identifications.

**References:**

- Feitzinger, J.V., and Stüwe, J.A. 1984, *A&AS*, 58, 365  
 Feitzinger, J.V., and Stüwe, J.A. 1986, *A&AS*, 63, 203 (erratum)  
 Lynds, B.T. 1962, *ApJS*, 7, 1

**File Information:** 3 files, 771 Kbytes      **Status:** Has been checked for consistency  
 Documentation in hard copy form only  
 Available via network

**ADC 7070A**

Baiesi-Pillastrini, G.C., Palumbo, G.G.C., and Vettolani, G.

**Galaxies Rotation Curves: A Catalogue (1983)**

**Keywords:** *radial velocities; optical galaxies; galaxy catalogs*

**Description:** The catalog contains all bibliographical information pertaining to rotation curves of external galaxies that have appeared in the astronomical literature up to December 1981. Information about 271 galaxies is given from 332 papers. The catalog includes galaxy names, morphological types, positions, radial velocities, approximate extent of the rotation curves from the centers of the galaxies, and references.

**Reference:**

- Baiesi-Pillastrini, G.C., Palumbo, G.G.C., and Vettolani, G. 1983, *A&AS*, 53, 373

**File Information:** 2 files, 59.1 Kbytes      **Status:** Has been checked for consistency  
 Documentation in hard copy form only  
 Available via network

**ADC 7071**

Baiesi-Pillastrini, G.C., Palumbo, G.G.C., and Vettolani, G.

**Redshifts for Zwicky's Near Clusters (1984)**

**Keywords:** *redshifts; clusters of galaxies*

**Description:** The catalog contains a list of redshifts for Zwicky's near clusters. All of the 503 near Zwicky clusters as given in the *Uppsala General Catalogue of Galaxies (UGC)* are listed and radial velocity information for those that have at least one galaxy with published redshift positioned within the contours given in the Zwicky catalog is provided. Redshifts of galaxies belonging to clusters were obtained from the *Catalog of Radial Velocities of Galaxies*. The catalog includes *UGC* cluster numbers, Zwicky field numbers, contour numbers, positions, heliocentric cluster radial velocities, and notes.

**Reference:**

- Baiesi-Pillastrini, G.C., Palumbo, G.G.C., and Vettolani, G. 1984, *A&AS*, 56, 363

**File Information:** 5 files, 84.1 Kbytes      **Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 7073**

Helou, G., and Walker, D.W.

**IRAS Small Scale Structure Catalog (1985)**

**Keywords:** *infrared photometry; nonstellar objects; infrared sources*

**Description:** Sources resolved by the Infrared Astronomical Satellite in any band (12, 25, 60, or 100  $\mu$ ) but smaller than eight arcmin in angular extent are to be found in the *Small Scale Structure Catalog*, also known as the catalog of "small extended sources." The catalog gives the infrared characteristics of 16740 objects including, e.g., galaxies, planetary nebulae and compact HII regions. The catalog lists for each entry and in each band separately a position accurate to about one arcmin (rms); a flux density accurate to 50% (rms) overall, and better at high signal to noise ratios; a rough indicative size if a point source is present at the same location; and a variety of warning and processing flags. If a detailed shape description or a more accurate position, flux, or size are needed, these must be determined from the raw detector output. Incompleteness is a complex function of wavelength band, brightness, and location, so the absence of an entry in the *SSS Catalog* does not necessarily imply the lack of detectable extended emission. Many entries, mostly at 60 and 100  $\mu$ , refer only to emission features that are details in larger structures known as Galactic cirrus. Complete documentation, including a description of the catalog format, is contained in the printed version.

**References:**

Helou, G., and Walker, D.W. 1985, *Jet Propulsion Laboratory*

IRAS Catalogs: The Small Scale Structure Catalog, 1988, eds. Helou, G., and Walker D.W. (Washington, D.C.: GPO), NASA RP-1190, vol 7

**File Information:** 2 files, 4.15 Mbytes      **Status:** Has been checked for consistency  
Available in microfiche version  
Available via network  
Available on CD-ROM  
Full documentation available

**ADC 7074**

Arp, H.C.

**Atlas of Peculiar Galaxies (1966)**

**Keywords:** *atlases; galaxy catalogs*

**Description:** This catalog lists the positions, identifications, redshifts, and source references for all 338 objects presented in the *Atlas of Peculiar Galaxies* by Arp.

**Reference:**

Arp, H.C. 1966, *ApJS*, 14, 1

**File Information:** 1 file, 27.1 Kbytes      **Status:** Has been checked for consistency  
 Documentation in hard copy form only  
 Available via network

**ADC 7075**

Aaronson, M., et al.

**A Catalog of Infrared Magnitudes and H I Velocity Widths for Nearby Galaxies  
 (1982)**

**Keywords:** *infrared photometry; nearby galaxies; galaxy catalogs*

**Description:** The *Catalog of Infrared Magnitudes and H I Velocity Widths for Nearby Galaxies* is a compilation of magnitudes at 1.6  $\mu$ , 21 cm velocity widths, and related data on 308 nearby galaxies. The information listed includes identification, B1950 coordinates, morphological type, inclination, H (1.6  $\mu$ m) magnitude, logarithm of the isophotal diameter, heliocentric redshift, corrected velocity width, distance relative to the Virgo cluster, data sources, and notes.

**Reference:**

Aaronson, M., Huchra, J.P., Mould, J.R., Tully, R.B., Fisher, J.R., van Woerden, H., Goss, W.M., Chamaraux, P., Mebold, U., Siegman, B., Berriman, G., and Persson, S.E. 1982, *ApJS*, 50, 241

**File Information:** 1 file, 33.4 Kbytes      **Status:** Has been checked for consistency  
 Documentation in hard copy form only  
 Available via network

**ADC 7077**

Karachentsev, I.D.

**Catalogue of Isolated Pairs of Galaxies in the Northern Hemisphere (1972)**

**Keywords:** *galaxy catalogs*

**Description:** The catalog is a compilation of observational data for 603 isolated pairs of galaxies with component magnitudes brighter than 15.7 and north of declination  $-3^\circ$ . The catalog includes pair numbers and component letters, coordinates, apparent magnitudes, radial velocities, major axes and eccentricities, Hubble classifications, spectral types, and distances between components.

**Reference:**

Karachentsev, I.D. 1972, *Soobshch. Spets. Astrofiz. Obs.* No. 7

**File Information:** 1 file, 69.5 Kbytes      **Status:** Has been checked for consistency  
 Documentation in hard copy form only  
 Available via network

**ADC 7079A**

Fairall, A.P., Lowe, L., and Dobbie, P.J.K.

**A Catalogue of Galaxies South of Declination  $-30^\circ$  That Have Been Observed Spectroscopically (1983)****Keywords:** *spectroscopy; galaxy catalogs*

**Description:** The catalog is a compilation of information identifying redshifts and references for 3300 southern galaxies cited from publications up to mid-1985. It is an update of the 1983 version. It is intended as a guide to what southern galaxies have been observed spectroscopically and what redshifts are available. The catalog includes designations, positions, heliocentric velocities (In the case of multiple observations, a representative value is chosen.), and references. A second file contains the full form of the references cited by a two-digit code number in the main catalog file.

**Reference:**

Fairall, A.P., Lowe, L., and Dobbie, P.J.K. 1983, Publ. Dep. Astron., Univ. Cape Town No. 5

**File Information:** 2 files, 284 Kbytes**Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

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**ADC 7080**

Wood, K.S., et al.

**The HEAO A-1 X-Ray Source Catalog (1984)****Keywords:** *X-ray sources*

**Description:** The catalog contains X-ray sources detected with the NRL Large Area Sky Survey Experiment on the HEAO 1 satellite. The catalog is derived from the first six months of data from HEAO 1, during which time one scan of the entire sky was completed. Positions and intensities for 842 sources are included in the catalog with a limiting flux of 250 mJy at 5 keV. The catalog is more than 90% complete at a flux level equivalent to 1.5 mJy at 5 keV, for a Crab-like spectrum. The intensity shown for a source is a mean value over the observing interval rather than an extreme value. The catalog has been cross-referenced with published literature.

**Reference:**Wood, K.S., Meeking, J.F., Yentis, D.J., Smathers, H.W., McNutt, D.P., Bleach, R.D., Byram, E.T., Chubb, T.A., and Friedman, H. 1984, *ApJS*, 56, 507**File Information:** 1 file, 249 Kbytes**Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 7081A**

Amnuel, P.R., Guseinov, O.H., and Rakhamimov, Sh.Yu.

**Second Catalogue of X-Ray Sources (1982)****Keywords:** *X-ray sources*

**Description:** The catalog is a compilation of X-ray sources containing 677 objects known as of September 1979. X-ray data for 677 sources are the result of X-ray sky surveys by rockets, balloons, and satellites during 1964-1979. The sky survey is practically complete to X-ray intensities of nearly 4 mJy in the 2-6 keV range. The current version does not include the investigation by HEAO 2. The catalog includes source names, positions of the maximum probability densities, date of the measurements, the type of measuring systems, the ranges at which the measurement was performed, maximum intensities for constant sources, and ratio of the maximum observed value of intensity to the minimum one for variable sources.

**Reference:**Amnuel, P.R., Guseinov, O.H., and Rakhamimov, Sh.Yu. 1982, *Ap&SS*, **82**, 3**File Information:** 1 file, 239 Kbytes

**Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 7082A**

Karachentseva, V.E., Lebedev, V.S., and Shcherbanovskij, A.L.

**Catalogue of Isolated Galaxies (1986)****Keywords:** *galaxy catalogs*

**Description:** The catalog is a compilation of information on 1051 isolated galaxies with apparent magnitudes brighter than 15.7 and north of declination  $-3^\circ$ . New data about the morphological types, the isolation class, and the radial velocities have been added to this version. The catalog includes running numbers for the galaxies, equatorial coordinates, isolation classes, apparent magnitudes, morphological types, major axes, axial ratios, and radial velocities.

**References:**

Karachentseva, V.E., Lebedev, V.S., and Shcherbanovskij, A.L. 1986, *CDS Bull.* No. 30, p. 125

Karachentseva, V.E., Lebedev, V.S., and Shcherbanovskij, A.L. 1973, *Spets. Astrofiz. Obs., Zelenchukskaya*, vyp. (No.) 8

**File Information:** 1 file, 53.4 Kbytes

**Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 7084A**

Geller, M.J., and Huchra, J.P.

**Groups of Galaxies. III. The CfA Survey (1983)****Keywords:** *surveys; galaxy catalogs*

**Description:** The catalog contains statistically homogeneous groups of galaxies based on the Harvard-Smithsonian Center for Astrophysics (CfA) redshift survey. Groups in the catalog are all density enhancements in redshift space of a factor greater than 20. All groups contain at least three members. There are 176 groups in the catalog and 102 groups have been identified in one or more previous studies. The catalog includes group numbers, numbers of members, equatorial coordinates, mean flow-corrected galactocentric velocities, line-of-sight-velocity dispersion, integrated group magnitudes, crossing times for the groups, and mean harmonic radii of the groups.

**Reference:**Geller, M.J., and Huchra, J.P. 1983, *ApJS*, 52, 61

**File Information:** 2 files, 15.0 Kbytes      **Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 7085A**

Hickson, P.

**Systematic Properties of Compact Groups of Galaxies (1982)****Keywords:** *clusters of galaxies; galaxy catalogs*

**Description:** The catalog is a list of 100 compact groups of galaxies identified by a systematic search of the *Palomar Observatory Sky Survey* red prints. Each group contains four or more galaxies, has an estimated mean surface brightness brighter than 26.0 mag per arcsec and satisfies an isolation criterion. The catalog includes running numbers, equatorial coordinates, group types according to the two brightest members, number of galaxies in the group, angular diameters of the smallest circles containing the geometric centers of all group members, total magnitudes (red) of those galaxies counted as group members, estimated red magnitudes of the brightest galaxies in the groups, corrected redshifts of the brightest galaxies, and other designations of the groups.

**Reference:**Hickson, P. 1982, *ApJ*, 255, 382

**File Information:** 1 file, 7.03 Kbytes      **Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 7086A**

Huchra, J.P., and Geller, M.J.

**Groups of Galaxies. I. Nearby Groups (1982)**

**Keywords:** *clusters of galaxies; galaxy catalogs*

**Description:** The catalog contains nearby groups of galaxies with outer number density enhancement greater than 20. The groups were searched using a whole sky catalog of 1312 galaxies brighter than mag 13.2 (B) with complete redshift information (Huchra et al. 1982). Only groups containing more than two members are included. The catalog includes equatorial coordinates, average radial velocities, and velocity dispersions for 92 nearby groups in the first file. A second file contains the results of a comparison between this catalog and de Vaucouleurs' catalog of nearby groups (de Vaucouleurs 1975).

**References:**

Huchra, J.P., and Geller, M.J. 1982, *ApJ*, 257, 423

Huchra, J.P., Davis, M., Latham, D., and Tonry, J. 1982, *ApJS*, 52, 89

de Vaucouleurs, G. 1975, in *Galaxies and the Universe*, eds. A. Sandage, M. Sandage, and J. Kristian (Chicago: University of Chicago Press)

**File Information:** 2 files, 5.18 Kbytes      **Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 7089A**

Shakhbazyan, R.K.

**Compact Groups of Compact Galaxies (1973)**

**Keywords:** *clusters of galaxies; galaxy catalogs*

**Description:** The catalog is a compilation of ten published lists of compact groups of compact galaxies found on the *Palomar Sky Survey* red charts. The catalog contains 377 groups of compact galaxies and includes identifications, equatorial coordinates, numbers of constituent galaxies, magnitudes of the brightest member, sizes of the groups as a whole, and coefficients of relative compactness.

**References:**

Shakhbazyan, R.K. 1973, *Astrofizika* 9, 495

Shakhbazyan, R.K., and Petrosyan, M.B. 1974, *Astrofizika* 10, 13

Baier, F.W., Petrosyan, M.B., Tiersch, H., and Shakhbazyan, R.K. 1974, *Astrofizika* 10, 327

Petrosyan, M.B. 1974, *Astrofizika* 10, 471

Baier, F.W., and Tiersch, H. 1975, *Astrofizika* 11, 221

Baier, F.W., and Tiersch, H. 1976, *Astrofizika* 12, 7

Baier, F.W., and Tiersch, H. 1978, *Astrofizika* 14, 279

Petrosyan, M.B. 1978, *Astrofizika* 14, 631

Baier, F.W., and Tiersch, H. 1979, *Astrofizika* 15, 33

**File Information:** 1 file, 18.4 Kbytes      **Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

ADC 7090A

Kogoshvili, N.G.

## Merged Catalogue of Galaxies (1986)

**Keywords:** *galaxy catalogs*

**Description:** The catalog has been compiled at Abastumani Astrophysical Observatory. It comprises, on the whole, nearly all galaxies in the region between  $+90^\circ$  and  $-33^\circ$  declination and brighter than mag 15.1 as well as some fainter ones. The *Morphological Catalogue of Galaxies* has been used as a main source of data for this catalog. The number of galaxies in the catalog is 31917. The catalog is kept up to date, and this version adds the data published from 1973-1983. The catalog includes designations, equatorial coordinates, magnitudes and colors, angular diameters, surface brightness, position angles, detailed structure descriptions, classifications on several different systems, rotation curve data, supernova dates and counts, HII regions, radio flux densities, multiple-system membership, and interaction details in the first file. The second file lists the full forms of the references cited by code numbers in the first file. Also included are brief descriptions of the content of each reference.

**Reference:**

Kogoshvili, N.G. 1986, Abastumani Astrophysical Observatory

**File Information:** 3 files, 11.7 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Full documentation available

ADC 7091

IPAC

## IRAS Asteroid and Comet Survey (1986)

**Keywords:** *infrared photometry; comets; minor planets*

**Description:** The Infrared Astronomical Satellite Asteroid and Comet Survey is the largest, most uniform and least biased survey ever conducted of asteroids and comets. Because the emission observed is thermal, the present survey is not plagued by the albedo bias to which visible wavelength analogues are susceptible. The IRAS hours- and weeks-confirmation strategy was developed to discriminate against moving sources. However, to provide data for the study of the properties of known and newly discovered asteroids, all sources with infrared colors typical of solar system objects were recorded in auxiliary files at both seconds- and hours-confirmation, with an emphasis on completeness. Asteroids and comets are bright infrared sources, particularly at  $25\ \mu$ . In addition to data for 25 comets and 1811 known asteroids, a search for objects moving across the sky more rapidly than about 1 arcmin per hour resulted in the discovery of six new comets, an extensive cometary debris trail, and two Apollo asteroids, one of which may be an extinct cometary nucleus. Asteroids and comets moving more slowly than 1 arcmin per hour would hours-confirm and thus reside in the Working Survey Data Base. Sixteen Asteroid and Comet data products were generated, of which four — the *IRAS Asteroid Catalog*, the *Asteroid Statistics Catalog*, the *Low Resolution Spectrometer Spectra of Selected Asteroids*, and the *IRAS Comet Catalog* — are bound together with the Asteroid

and Comet Explanatory Supplement and a user's guide to the data products. The complete set of data products is listed in Table 8-1 of that volume. The NSSDC holds seven data products: the *Catalog of IRAS Asteroid Sightings*, the *IRAS Asteroid Catalog*, the Asteroid Statistics data base, the *IRAS Comet Catalog*, the Asteroid Names and Pointers data base, the Asteroid Ground-Based data base, and the Rejected Sightings data base.

**Reference:**

IPAC 1986, Jet Propulsion Laboratory preprint JPL D-3698

**File Information:** 8 files, 7.14 Mbytes      **Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 7092**

Lyngå, G.

**Catalogue of Open Cluster Data, 5th Edition (1987)**

**Keywords:** *open clusters; bibliography; combined data*

**Description:** The fifth edition of the Lund's *Catalogue of Open Cluster Data* gives key information for all known open star clusters in this galaxy. As far as possible only published data have been quoted; for some of the parameters, these values have been selected from other references, which are listed. The catalog includes cluster identification, position, reference, Trumpler classification, membership, angular diameter, mean distance, reddening, turn-off color, age, Fe/H, radial velocity, star types, magnitudes, color, number of observed stars, richness class, earliest spectral class, magnitude brightest member, galactocentric distance, linear diameter, and comments.

**Reference:**

Lyngå, G. 1987, Lund Observatory

**File Information:** 6 files, 2.21 Mbytes      **Status:** Has been checked for consistency  
Available via network  
Available on CD-ROM  
Full documentation available

**ADC 7094**

Klinglesmith, D.A., and Hollis, J.M.

**A Palomar Observatory Sky Survey Atlas of Selected Molecular Clouds (1987)**

**Keywords:** *atlases; nebulae; surveys*

**Description:** The atlas contains data digitized from the *Palomar Observatory Sky Survey* glass plates for 43 cold, dense molecular clouds. Regardless of the clouds' extent, the digitized area is limited to a 23 square arcmin on the sky with pixel size of 1.3". Central coordinates (B1950.0) for each cloud are given. The data and requisite header information for each digitized molecular cloud are formatted in accordance with the Flexible Image Transport System (FITS) standard.

**Reference:**

Klinglesmith, D.A., and Hollis, J.M. 1987, *ApJS*, **64**, 127

**File Information:** 6 files, 2.21 Mbytes      **Status:** Has been checked for consistency  
Description for machine version

**ADC 7095**

Struble, M.F., and Rood, H.J.

**A Compilation of Redshifts and Velocity Dispersions for Abell Clusters (1987)**

**Keywords:** *clusters of galaxies; velocity dispersion; redshifts*

**Description:** The catalog contains redshifts and velocity dispersions for all Abell clusters for which these data had been published up to July 1986. The list contains redshift data for 578 Abell clusters and velocity dispersion data for 77. It supersedes previous compilations of Fetisova (1982) and Sarzin, Rood, and Struble (1982). A separate file contains a listing of redshifts previously incorrectly assigned to Abell clusters. The assigned redshifts are probably for foreground and background galaxies superposed on the listed Abell cluster. The catalog also includes B1950 equatorial coordinates for the centers of the listed clusters, numbers of observations used to determine the redshifts, and bibliographical references citing the data sources.

**References:**

Struble, M.F., and Rood, H.J. 1987, *ApJS*, **63**, 543

Fetisova, T.S. 1982, *Soviet Astron. AJ*, **25**, 647 (Fet)

Sarazin, C., Rood, H.J., and Struble, M.F. 1982, *A&A*, **108**, L7

**File Information:** 4 files, 65.6 Kbytes      **Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 7098**

Kraan-Korteweg, R.C.

**A Catalog of 2810 Nearby Galaxies (1986)**

**Keywords:** *galaxy catalogs*

**Description:** This is a catalog of 2810 nearby galaxies. The galaxies are magnitude-limited at  $B_t \leq 13.4$  mag, volume-limited at  $V_o \leq 500 \text{ km}^* \text{ s}^{-1}$ , and the catalog includes only galaxies in the Virgo cluster within a  $10^\circ$  cone around M87 limited at  $B_t \leq 14.95$  mag. Distances are calculated for all galaxies in the catalog with known redshifts. The catalog includes the right ascension, declination, morphological type, luminosity class, diameter, axis ratio, heliocentric velocity, blue magnitude, and various errors.

**Reference:**

Kraan-Korteweg, R.C. 1986, *A&AS*, **66**, 255

**File Information:** 1 file, 658 Kbytes**Status:** Is distributed as received  
Documentation in hard copy form only  
Available via network

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**ADC 7100**

Kogoshvili, N.G.

**Compilation of the Fifth Volume of Morphological Catalogue of Galaxies (1987)****Keywords:** *morphology*

**Description:** The *Morphological Catalogue of Galaxies, Volume 5* (Vorontsov-Velyaminov et al. 1974) includes 1637 galaxies, probably no fainter than the fourteenth magnitude. The catalog was based on *Palomar Sky Atlas* prints and comprises areas from  $-30^\circ$  to  $-45^\circ$  in declination. In contrast to the earlier four volumes of the catalog, the fifth was based on the red prints of the Sky Survey only. Visual magnitude estimates are thus in the red. Note that in all cases when in other sources the photoelectric B or photographic magnitude of galaxies are encountered, preference to those values has been given over those of Vorontsov-Velyaminov's estimates. All notes to galaxies published in the earlier volume are included here as well (Kogoshvili 1983). In addition, the following data were used from the *ESO/Uppsala Survey* (Lauberts 1982): magnitudes, colors, radial velocities, Hubble types, and galaxy diameters as measured on the *ESO(B)* atlas plates up to the surface brightness slightly fainter than 25 magnitudes per square arcsec. These maximum major and minor galaxy diameters are provided in the fifth volume in place of the values taken from the *UGC* catalog in the earlier four volumes. Various data from both the reference *Catalog of Bright Galaxies* (de Vaucouleurs et al. 1964) and B-V and U-B colors from the *General Catalogue of Photoelectric Magnitudes and Colours* (Longo et al. 1983) were included. Fields included in the catalog are identification number; zone sign, number, and field number; galaxy number in the field; component or symbolic designation; *NGC* or *IC* identification; B1950.0 position, magnitude, magnitude accuracy, and magnitude reference; angular diameters, surface brightness, symbolic description galaxy, morphological type, galaxy type, heliocentric radial velocity; radial velocity corrected for solar motion; rotational velocity, dates of first two supernovae, number of supernovae, number of HII regions, U-B and B-V colors and references, radio flux densities at 178, 780, 1400, 2700, and 5000 MHz; number of nearby cluster; and coded information on membership of the galaxy to double or multiple systems, interaction features, and faint components.

**References:**

- Kogoshvili, N.G. 1987, *Abastumani Astrophysical Observatory*
- Lauberts, A. 1982, *The ESO/Uppsala Survey of the ESO(B) Atlas*, European Southern Observatory
- Longo, G., Vaucouleurs, A. de, and Corwin, H.G. 1983, *A General Catalogue of Photoelectric Magnitudes and Colours in the U,B,V System*, Univ. Texas
- Kogoshvili, N.G. 1983, *CDS Bull. No. 25*, p. 63
- Vaucouleurs, G. de, Vaucouleurs, A. de, and Corwin, H. 1964, *Reference Catalogue of Bright Galaxies*, Univ. Texas
- Vaucouleurs, G. de, Vaucouleurs, A. de, and Corwin, H. 1976, *Second Reference Catalogue of Bright Galaxies*, Univ. Texas
- Vorontsov-Velyaminov, B.A., and Arkhipova, V.P. 1974, *Morphological Catalogue of Galaxies, V. 5*, Moskow Univ.

**File Information:** 4 files, 592 Kbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Description for machine version

**ADC 7109**

Rice, W., and Kopan, E.L.

**IRAS Surface Brightness Maps of Large Optical Galaxies (1988)****Keywords:** *optical galaxies; infrared sources*

**Description:** The *Large Galaxy Catalog* reports Infrared Astronomical Satellite observations of 85 galaxies listed in RC2 with apparent blue light isophotal diameters ( $D_{.25}$ ) greater than 8'. Surface brightness maps at 12, 25, 60 and 100 microns are given in FITS format for each galaxy. There are only 83 sets of maps because NGC 205 and M31 are in one field as are M81 and M82. The maps were made using pointed observation data when these were available. An estimate of the diffuse zodiacal plus Galactic emission, derived locally, is subtracted in each case. Rice et al. (1988) describe the data processing method, tabulate attributes of the maps (galaxy LGC number, common name, map center coordinates and dimensions, pixel sizes, and noise estimates), and give total flux densities of the galaxies.

**References:**

Rice, W., and Kopan, E.L. 1988, IPAC Report, 15 February 1988

Rice, W.L., Lonsdale, C.J., Soifer, B.T., Neugebauer, G., Kopan, E.L., Lloyd, L.A., de Jong, T., and Habing, H.J. 1988, ApJS, 68, 91

de Vaucouleurs, G., de Vaucouleurs, A., and Corwin Jr., H.G. 1976, Second Reference Catalog of Bright Galaxies (Austin: Univ. of Texas Press) (RC2)

**File Information:** 22 files, 1.40 Mbytes      **Status:** Has been checked for consistency  
 Full documentation available

**ADC 7110**

Abell, G.O., Corwin Jr., H.G., and Olowin, R.P.

**A Catalogue of Rich Clusters of Galaxies (1989)**

**Keywords:** *clusters of galaxies; galaxy catalogs; nonstellar objects; surveys; positional data; magnitudes; fundamental catalog*

**Description:** A *Catalogue of Rich Clusters of Galaxies (RCG)* Abell, Corwin, and Olowin 1989) is an all-sky catalog of 4073 rich clusters of galaxies, each having at least 30 members within the magnitude range  $m_3$  to  $m_3 + 2$  ( $m_3$  is the magnitude of the third brightest cluster member.) and each with a nominal redshift  $< 0.2$ . The southern data have been collected from a survey of UK 1.2 m Schmidt telescope IIIa-J plates and films and have been reduced to the systems defined by the northern data previously published by G.O. Abell. A revised northern catalog, including Bautz-Morgan types and redshifts where known, is also included. The RCG includes Abell number; Abell type; Bautz-Morgan type; B1950, J2000, galactic coordinates; redshift; richness class; distance class; the Southern Sky Survey Field number and the field centers; rectangular coordinates of the

apparent cluster center in the Southern Sky Survey field; the number of clusters between  $m_3$  and  $m_3 + 2$ ; the weighted mean total V magnitude estimate for the first-ranked, third-ranked, and tenth-ranked cluster members; cross references to previous listings; the number of fields in which the cluster was found; and the observer. The catalog is in four files that contain data identical to the tables published in the original reference. They are as follows: the final northern Abell catalogue, the final southern Abell catalog, the supplementary southern Abell catalog, and the northern Abell clusters found during the southern survey. The data in these files are in exactly the same format. A document describing the overall file structure and the individual data fields is included.

**Reference:**

Abell, G.O., Corwin Jr., H.G., and Olowin, R.P. 1989, *ApJS*, 70, 1

**File Information:** 7 files, 942 Kbytes      **Status:** Has been checked for consistency  
 Available on CD-ROM  
 Description for machine version

**ADC 7112**

de Vaucouleurs, G., de Vaucouleurs, A., and Corwin Jr., H.G.

**Second Reference Catalogue of Bright Galaxies (1976)**

**Keywords:** *galaxy catalogs*

**Description:** The catalog contains information on 4364 galaxies with references to papers published between 1964 and 1975. It is a revision of the *Reference Catalog of Bright Galaxies (BGC)*. The Southern Hemisphere is underrepresented in the catalog. The catalog is not complete to any specified magnitude, diameter, or redshift. It is merely a compilation of data reduced to a uniform system for those galaxies that have been the object of some individual study and are neither smaller than 0.5' in diameter or fainter than sixteenth magnitude or have redshifts in excess of 15000 km/sec. All known corrections to the original *BGC* were taken into account. Apart from the quantity of information the major improvement of the *RC2* over the original *BGC* is the more rigorous definitions and greater precision of the diameters, magnitudes, and radial velocity data. The catalog includes identifications, positions, morphology, classifications, diameters, magnitudes, colors, surface brightness, radio fluxes, and references.

**Reference:**

de Vaucouleurs, G., de Vaucouleurs, A., and Corwin Jr., H.G. 1976, Austin, Univ. of Texas Press

**File Information:** 4 files, 1.39 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 7113**

IPAC

**Cataloged Galaxies and Quasars Observed in the IRAS Survey, Version 2 (1989)**

**Keywords:** *infrared photometry; surveys; QSOs; infrared sources; galaxy catalogs*

**Description:** The *Extragalactic Catalog* is a compilation of Infrared Astronomical Satellite point source data for objects appearing in the most widely-used extragalactic catalogs. It contains 11444 IRAS point sources that can be positionally associated with cataloged galaxies and quasars and gives information on associations of point sources with sources in the *IRAS Small Scale Structure Catalog*. Because no criterion other than positional coincidence (with a generous search window) was used to match the IRAS sources with their counterparts, the associations should not a priori be accepted as true identifications. Included in the *Extragalactic Catalog* are the following data: IRAS source names; equatorial and Galactic coordinates; positional uncertainty ellipses; 12, 25, 60, and 100 micron flux densities with associated uncertainties and quality flags; and associations of the infrared sources with objects in 12 extragalactic catalogs, including the UGC, NGC, IC, and MCG catalogs, the Arp Atlas, and the Markarian and Zwicky catalogs. A printed version of the *Extragalactic Catalog* contains (Fullmer and Lonsdale 1989) documentation for the machine-readable version and a preliminary analysis of the data. The data are presented in two Flexible Image Transport System (FITS) binary tables.

**References:**

**IPAC 1989**

Fullmer, L., and Lonsdale, C. 1989, *Cataloged Galaxies and Quasars Observed in the IRAS Survey, Version 2* (Pasadena: Infrared Processing and Analysis Center, JPL D-1932)

**File Information:** 3 files, 3.75 Mbytes      **Status:** Has been checked for consistency  
Available via network  
Available on CD-ROM  
Description for machine version

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**ADC 7115**

**Lauberts, A., and Valentijn, E.A.**

**The Surface Photometry Catalogue of the ESO-Uppsala Galaxies (1989)**

**Keywords:** *galaxy catalogs; surface photometry; fundamental catalog; morphology*

**Description:** The 15467 southern galaxies in this catalog were scanned from 407 blue and 407 red original ESO-Schmidt plates using a PDS microdensitometer. The galaxies were selected from the *ESO-Uppsala Catalogue*. The original selection criterion was a minimum visual angular diameter of 1'. The plates were calibrated using a catalog of photoelectric standards of 1700 standard galaxies transformed to a photometric standard system (Cousins) created by the authors. The result is a catalog acquired in a homogeneous fashion for all types of galaxies in various environments. The extracted parameters include radial surface brightness profiles, magnitudes at several isophotal levels, colors, color gradients, effective radius parameters, structural parameters such as axial ratios, position angles, and profile gradients. Detailed discussion of the catalog creation is given in the published book version that includes a subset of these parameters.

**Reference:**

Lauberts, A., and Valentijn, E.A. 1989, *The Surface Photometry Catalogue of the ESO/Uppsala Galaxies*, European Southern Observatory

**File Information:** 3 files, 3.75 Mbytes      **Status:** Has been checked for consistency  
Description for machine version

**ADC 7116**

Corwin Jr., H.G., de Vaucouleurs, A., and de Vaucouleurs, G.

**Southern Galaxy Catalogue (SGC), A Catalogue of 5481 Galaxies South of Declination -17 Degrees Found on 1.2-m UK Schmidt IIIa-J (1985)**

**Keywords:** *galaxy catalogs*

**Description:** The *Southern Galaxy Catalogue* is intended to provide a finding list of galaxies larger than about 1.5' to 2', south of declination -17°. It also provides, as far as possible, precise positions, morphological types in the revised Hubble system (de Vaucouleurs 1959, 1963; de Vaucouleurs, de Vaucouleurs, and Corwin, 1976), luminosity classifications in the DDO system (van den Bergh 1960a, b, 1966), and diameters and axis ratios. The catalog is essentially complete for diameters larger than 3.3'. Only a few objects smaller than 1' are included. The two largest galaxies, the Large and Small Magellanic Clouds, are not included. The notes contain information on the appearance of the galaxy and on the surrounding field. Ring diameters were measured in all galaxies where the rings could be seen clearly. The diameters of lenses were also measured in many lenticulars. Distances between components of the interacting galaxies are usually given, and sometimes distances are given to superposed or nearby stars.

**References:**

- Corwin Jr., H.G., de Vaucouleurs, A., and de Vaucouleurs, G. 1985, *Univ. of Texas Monograph No. 4*  
 de Vaucouleurs, G. 1959 *Handbook der Physik*, Vol. 53, 275 (Berlin: Springer-Verlag)  
 de Vaucouleurs, G. 1963, *ApJS*, 8, 31  
 de Vaucouleurs, G. et al. 1976, *Second Reference Catalogue of Bright Galaxies* (Austin: Univ. Texas Press)  
 van den Bergh, S. 1960a, *ApJ*, 131, 215  
 van den Bergh, S. 1960b, *ApJ*, 131, 558  
 van den Bergh, S. 1966, *AJ*, 71, 922

**File Information:** 5 files, 1.39 Mbytes      **Status:** Has been checked for consistency  
Available via network  
Full documentation available

**ADC 7117**

Hewitt, A., and Burbidge, G.

**A New Optical Catalog of Quasi-Stellar Objects (1989)**

**Keywords:** *BL Lac objects; QSOs*

**Description:** The catalog is a compilation of data and information for optical quasistellar and BL Lacertae objects complete to June 1988. It is an updated version of the third edition of the compilation prepared and published by the same authors in 1987. The present version of the catalog contains 4296 QSOs and 87 BL Lacertae objects. Data included are coordinate designations, other names, equatorial coordinates (B1950.0), apparent magnitudes, B-V, U-B, emission and absorption redshifts, emission lines, references, and notes.

**References:**

- Hewitt, A., and Burbidge, G. 1989, *ApJS*, 69, 1  
 Hewitt, A., and Burbidge, G. 1987, *ApJS*, 63, 1

**File Information:** 6 files, 2.53 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 7118**

edited by Sinnott, R.W.

**NGC 2000.0, The Complete New General Catalogue and Index Catalogue of  
 Nebulae and Star Clusters by J.L.E. Dreyer (1988)**

**Keywords:** *galaxy catalogs; nonstellar objects*

**Description:** *NGC 2000.0* is a modern compilation of the *New General Catalogue of Nebulae and Clusters of Stars (NGC)*, the *Index Catalogue (IC)*, and the *Second Index Catalogue* compiled by J.L.E. Dreyer (1888, 1895, 1908). The new compilation of these classical catalogs is intended to meet the needs of present-day observers by reporting positions at equinox B2000.0 and by incorporating the corrections reported by Dreyer himself and by a host of other astronomers who have worked with the data and compiled lists of errata. The object types given are those known to modern astronomy. The catalog lists object ID, object type, positions in equinox B2000.0, source of modern data (See *NGC 2000.0* paperback copy.), constellation, object size, magnitude, and the description of the object as given by Dreyer. The order of the new catalog is strictly by right ascension, the *NGC* and *IC* objects being merged into one machine-readable file.

This catalog is copyrighted by Sky Publishing Corporation, which has kindly deposited the machine version in the data centers for permanent archiving and dissemination to astronomers for scientific research purposes only. The data should not be used for commercial purposes without the explicit permission of Sky Publishing Corporation.

**References:**

- Sinnott, R.W., ed. 1988, *Sky Publishing Corporation and Cambridge University Press*  
 Dreyer, J.L.E. 1888, *New General Catalogue of Nebulae and Clusters of Stars*, *MmRAS*, 49, Part I (reprinted 1953, London: Royal Astronomical Society)  
 Dreyer, J.L.E. 1895, *Index Catalogue of Nebulae Found in the Years 1888 to 1894 with Notes and Corrections to the New General Catalogue*, *MmRAS*, 51, 185 (reprinted 1953, London: Royal Astronomical Society)

Dreyer, J.L.E. 1908, Second Index Catalogue of Nebulae Found in the Years 1895 to 1907; with Notes and Corrections to the New General Catalogue and to the Index Catalogue for 1888 to 1894, MmRAS, 59, Part 2, 105 (reprinted 1953, London: Royal Astronomical Society)

**File Information:** 5 files, 1.27 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Available on CD-ROM  
 Full documentation available

**ADC 7119**

Paturel, G., et al.

**An Extragalactic Database. I. The Catalogue of Principal Galaxies (1989)**

**Keywords:** *galaxy catalogs*

**Description:** This is a catalog of principal galaxies. It lists equatorial coordinates for the equinoxes 1950 and 2000 and cross identifications for 73197 galaxies. Of the 73197 galaxies, 40932 have coordinates with standard deviations of  $< 10''$ . Listed are 131601 names from the 38 most common sources. These data are given when available: morphological descriptions, apparent major and minor axes, apparent magnitudes, radial velocities, and position angles.

**Reference:**

Paturel, G., Fouqu , P., Bottinelli, L., and Gouguenheim, L. 1989, A&AS, 80, 299

**File Information:** 1 file, 10.4 Mbytes      **Status:** Is distributed as received  
 Available via network

**ADC 7120**

Mayer-Hasselwander, H.A.

**COS-B Final Database (1985)**

**Keywords:** *gamma rays; surveys*

**Description:** The *COS-B Final Database* consists of four parts: (1) the recorded photon data and related processing information; (2) instrument calibration information; (3) a collection of Fortran-77 programs for accessing the data base; and (4) binned skymaps of the galactic disc in several energy bands. Details can be found in the Explanatory Supplement to the COS-B Final Database.

**Reference:**

Mayer-Hasselwander, H.A. 1985, Explanatory Supplement to the COS-B Final Database

**File Information:** 20 files, 23.8 Mbytes      **Status:** Has been checked for consistency  
 Description for machine version

**ADC 7126**

Véron-Cetty, M.-P., and Véron, P.

**A Catalogue of Quasars and Active Galactic Nuclei (4th Edition) (1989)****Keywords:** *active galactic nuclei; BL Lac objects; QSOs*

**Description:** This version (4th edition) of the catalog contains 4234 quasars and 1108 active galaxies (of which 358 are Seyfert 1) with measured redshifts known prior to 1 March 1989. Information is not given about optical polarization, absorption-line, or x-ray properties. However, the absolute magnitude for each object and, when available, the 11- and 6-cm flux densities are given. Objects for which no redshift is published have been excluded. BL Lac objects, whether they have a published redshift or not, have been gathered in a special table. The catalog includes equatorial coordinates, 6- and 11-cm flux densities, radio spectral indices, published redshifts, classifications, V magnitudes, colors, absolute magnitudes, indications of x-ray detections, references to finding charts, photometry, redshift classification, and radio flux densities. The first file contains the description, the second file lists 4234 quasars, the third file lists 117 BL Lacertae objects, and the fourth file contains the active galactic nuclei; the fifth file holds the bibliographical references.

**Reference:**

Véron-Cetty, M.-P., and Véron, P. 1989, ESO Sci. Rep. No. 7

**File Information:** 5 files, 634 Kbytes

**Status:** Has been checked for consistency  
Available via network  
Available on CD-ROM  
Description for machine version

**ADC 7130**

Fichtel, C.E., et al.

**Catalog of SAS-2 Gamma-Ray Observations (1990)****Keywords:** *gamma rays*

**Description:** This catalog contains fluxes measured with the high-energy gamma-ray telescope flown aboard the second NASA Small Astronomy Satellite. The objects measured included various types of galaxies, QSOs, BL Lacertae objects, and pulsars. There are separate files for various types of objects, plus additional files for notes and references. The data cover about 60% of the sky and 89% of the galactic plane for gamma rays having energies  $>35$  MeV. The data reported vary according to the types of objects. The galaxy file contains object designation and type, equatorial coordinates (B1950.0), 35-100 MeV emission limit,  $>100$  MeV emission limit, and luminosity limit. The pulsar file contains object designation, period, period change (dP/dt), approximate distance, pulsed flux and luminosity limits, and notes. There is also a file containing data for miscellaneous other sources (SNRs, X-ray, and binary X-ray sources, etc.), but this file is not uniformly formatted because of its inhomogeneous data content. The primary sources for the data are Bignami et al. (1979), Fichtel et al. (1975, 1990), and Ögelman et al. (1976).

c-3.

**References:**

- Fichtel, C.E., Hartman, R.C., Hunter, S.D., Kniffen, D.A., Thompson, D.J., Ögelman, H.B., and Özel, M.E. 1990, *Laboratory for High Energy Astrophysics, NASA/Goddard Space Flight Center*
- Bignami, G.F., Fichtel, C.E., Hartman, R.C., and Thompson, D.J. 1979, *ApJ*, 232, 649
- Fichtel, C.E., Hartman, R.C., Kniffen, D.A., Thompson, D.J., Bignami, G.F., Ögelman, H., Özel, M.E., and Turner, T. 1975, *ApJ*, 198, 163
- Ögelman, H., Fichtel, C.E., Kniffen, D.A., and Thompson, D.J. 1976, *ApJ*, 209, 584

**File Information:** 5 files, 12.4 Kbytes

**Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 7133**

Green, D.A.

**A Revised Reference Catalogue of Galactic Supernova Remnants (1988)**

**Keywords:** *supernova remnants*

**Description:** The *Catalog of 174 Galactic SNRs* (Green 1984, 1988, 1991) lists all galactic supernova remnants (SNRs) known. The surface brightness and angular size of SNRs introduce selection effects affecting the completeness of the catalog. The catalog lists galactic and equatorial coordinates, angular size, flux density at 1 GHz in Jy, spectral index, type, and other names commonly used for the SNR.

**References:**

- Green, D.A. 1988, *Ap&SS*, 148, 3
- Green, D.A. 1991, *PASP*, 103, 209
- Green, D.A. 1984, *MNRAS*, 209, 499

**File Information:** 2 files, 22.9 Kbytes

**Status:** Has been checked for consistency  
Available via network  
Available on CD-ROM  
Description for machine version

**ADC 7135**

Takase, B., and Miyauchi-Isobe, N.

**Kiso Survey for Ultraviolet-Excess Galaxies (1984-1990)**

**Keywords:** *UV-excess galaxies; surveys*

**Description:** The catalog was created by merging 11 data sets published in the *Annals of Tokyo Astronomical Observatory or Publ. Nat. Astron. Obs. Japan*. The data were sorted by order of right ascension. Duplicate objects were listed multiple times. Included are *KUG* name, component designation, B1950 position, morphological type, major and minor diameters, apparent magnitude, degree of UV excess, cross identifications, *KUG* catalog number, Kiso sky area number, and the run-

ning number in each sky area. The accompanying documentation includes a table of the sky areas scanned in the survey.

**Reference:**

Takase, B., and Miyauchi-Isobe, N. 1984-1990, *Ann. Tokyo Astron. Obs.*, **19**, 565; **20**, 237, 335; **21**, 127, 181, 251, 363; **22**, 41; *Publ. Natl. Astron. Obs. Jpn.*, **1**, 11, 97, 181

**File Information:** 2 files, 802 Kbytes      **Status:** Has been checked for consistency  
Available via network  
Description for machine version

**ADC 7136**

Bottinelli, L., et al.

**An Extragalactic Data Base II. The H I Data (1990)**

**Keywords:** *galaxy catalogs; H I data*

**Description:** This catalog is a compilation of weighted mean H I parameters for 6439 galaxies. Raw 21-cm line widths have been reduced to a common system of widths at 20 and 50% of the peak intensity. They have been corrected for velocity resolution effects and tested for homogeneity. The H I fluxes, converted to uniform units, have been corrected for beam-filling effects. The catalog includes identification and alternate names, B1950 positions, line widths, H I flux, and heliocentric radial velocity. Details, including references to the original data, can be found in the published version.

**Reference:**

Bottinelli, L., Gouguenheim, L., Fouqu , P., and Paturel, G. 1990, *A&AS*, **82**, 391

**File Information:** 1 file, 515 Kbytes      **Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 7137B**

de Vaucouleurs, G., et al.

**Third Reference Catalogue of Bright Galaxies (1991)**

**Keywords:** *galaxy catalogs*

**Description:** The *Third Reference Catalogue of Bright Galaxies*, prepared by the University of Texas, contains entries for 23022 galaxies. Data include the positions for 1950 and 2000, galactic and supergalactic coordinates, several names, types and luminosity classes, optical diameters and axis ratios, the position angles of the major axes, galactic and internal extinctions, optical, infrared, and 21-cm magnitudes, color indices, surface brightnesses, 21-cm indices and linewidths, and radial velocities with respect to the Sun, the galactic standard of rest, and the 3K background. Data are arranged as in the published volume, i.e., four records per galaxy. The catalog attempts to be reasonably complete for galaxies having apparent diameters larger than 1' and blue magnitudes brighter

than about 15.5m, with a redshift no larger than 15000 km/sec. Approximately the same number of additional galaxies are also included.

**Reference:**

de Vaucouleurs, G., de Vaucouleurs, A., Corwin Jr., H.G., Buta, R.J., Paturel, G., and Fouquè, P. 1991, Springer-Verlag

**File Information:** 6 files, 9.75 Mbytes      **Status:** Has been checked for consistency  
Available via network  
Full documentation available

**ADC 7140**

Saito, M., et al.

**Catalogue of Galaxies Behind the Milky Way (1991)**

**Keywords:** *galaxy catalogs*

**Description:** This catalog, giving about 7000 galaxies behind the Milky Way between  $l=210^\circ$  and  $250^\circ$ , represents a systematic search for galaxies by means of 32 film copies of the *UK Schmidt Southern Infrared Atlas on the Milky Way* covering about 900 square degrees. In the search galaxies with apparent sizes greater than 0.1 mm on film (6.7" in size) were detected by visual inspection. The material and procedure of search are described in paper I and II appended before Vol. 1 and 2 of the catalog, respectively, which have been published in *Publ. Astron. Soc. Japan*, Vol. 42 (1990) and Vol. 43 (1991). The parameters of cataloged galaxies are also explained in paper I. Cross identifications with other catalogs are shown in the last column. Since the researchers performing the search changed between Vol. I and II, the determination of the brightness level determining the extend of the galaxy images somewhat differs between Vol. 1 and 2. For each record the catalog lists *CGMW* number, field number in the *ESO/SERC Southern Sky Survey*, coordinate on film in mm, B1950 positions, position in galactic coordinates, major and minor diameter on the film, morphological type, features, cross identifications.

**Reference:**

Saito, M., Ohtani, H., Asonuma, A., Kashikawa, N., Maki, T., Nishida, S., and Watanabe, T. 1991, *Contrib. Dep. Astron., Kyoto Univ.*, No. 300

**File Information:** 3 files, 868 Kbytes      **Status:** Has been checked for consistency  
Available via network  
Description for machine version

**ADC 7141**

Kennicutt Jr., R.C.

**A Spectrophotometric Atlas of Galaxies (1992)**

**Keywords:** *optical galaxies; spectra of galaxies; spectrophotometry*

**Description:** This catalog contains 56 nearby galaxies and their spectra, made with apertures

comparable to the diameters of the galaxies. This catalog can be used for a variety of applications but is not suitable for applications requiring precision colors over a long wavelength baseline, such as computation of K-corrections, and some spectral synthesis applications. Tests show that the spectrophotometry in this catalog is accurate to the few percent level over small wavelength regions and is accurate to the 10% level over the entire wavelength range. Most observations cover the spectral range between 3650 - 7100 Å with a resolution of 5 - 8 Å.

**Reference:**

Kennicutt Jr., R.C. 1992, *ApJS*, 79, 255

**File Information:** 2 files, 766 Kbytes      **Status:** Has been checked for consistency  
Available via network  
Description for machine version

**ADC 7142**

Fairall, A.P., and Jones, A.

**Southern Redshifts Catalogue, 5th Version (1991)**

**Keywords:** *optical galaxies; redshifts*

**Description:** The catalog is an update of the 1988 edition by the same authors. It lists names, equatorial and galactic coordinates, optical redshifts, references, and types for 12845 galaxies south of declination 0°. The published version of the catalog also includes plots of the distributions of galaxies in redshift space. Two files of references give the complete bibliography ordered numerically and alphabetically by author.

**References:**

Fairall, A.P., and Jones, A. 1991, *Publ. Dep. Astron., Univ. Cape Town*, No. 11  
Fairall, A.P., and Jones, A. 1988, *Mon. Notes Astron. Soc. S. Afr.*, 47, 25

**File Information:** 4 files, 1.27 Mbytes      **Status:** Has been checked for consistency  
Available via network  
Description for machine version

**ADC 7143**

Crampton, D., Schade, D., and Cowley, A.P.

**Quasar Candidates (1985)**

**Keywords:** *redshifts*

**Description:** This data set is based on data in three publications. The positions and magnitudes of quasar candidates discovered on Canada-France Hawaii-Telescope (CFHT) blue green plates are given. Spectroscopy with the Multiple Mirror Telescope (MMT) indicates that 70% of the candidates are quasars, and most of the others are white dwarfs or hot subluminoous stars. Most of the redshifts are  $z < 1.7$ . Additional spectroscopic observations at Steward Observatory were used. The catalog lists a name based on position, B1950 position, and B magnitude or visual magnitude, redshift, and

remarks.

**References:**

- Crampton, D., Schade, D., and Cowley, A.P. 1985, *AJ*, 90, 987  
 Crampton, D., Cowley, A.P., and Schmidtke, P.C. 1988, *AJ*, 96, 816  
 Crampton, D., Cowley, A.P., and Hartwick, F.D.A. 1990, *AJ*, 100, 47

**File Information:** 2 files, 42.5 Kbytes      **Status:** Has been checked for consistency  
 Available via network  
 Description for machine version

**ADC 7144**

Huchra, J.P., et al.

**CfA Redshift Catalogue (1992)**

**Keywords:** *redshifts*

**Description:** This catalog incorporates much of the latest velocity data from the Whipple Observatory and other sources as well as velocities from earlier compilations such as the *Second Reference Catalogue* of de Vaucoulers, de Vaucoulers, and Corwin; the *Index of Galaxy Spectra* of Gisler and Friel, and the *Catalogue of Radial Velocities of Galaxies* of Palumbo, Tanzella-Nitti, and Vettolani. The data included here are BT magnitudes and a few *UGC* numbers with increased "accuracy" in the velocity source information. This release does not include cross references with the *UGC* and has incomplete updates of the velocity sources.

**References:**

- Huchra, J.P., Geller, M.J., Clemens, C.M., Tokarz, S.P., and Michel, A. 1992, *Harvard-Smithsonian Center for Astrophysics*  
 Huchra, J., Geller, M., de Lapparent V., and Corwin, H. 1990, *Ap. J. Suppl.* 72, 433  
 de Vaucouleurs, G., de Vaucouleurs, A., and Corwin, H. 1976, *Second Reference Catalogue of Bright Galaxies*, (Austin: University of Texas Press)  
 Gisler, G., and Friel, E. 1979, *Index of Galaxy Spectra* (Tucson: Pachart)  
 Palumbo, G., Tanzella-Nitti, G., and Vettolani, G. 1983, *Catalogue of Radial Velocities of Galaxies* (New York: Gordon and Breach)

**File Information:** 8 files, 6.21 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Description for machine version

**ADC 7146**

Véron-Cetty, M.-P., and Véron, P.

**A Catalogue of Quasars and Active Nuclei, 5th Edition (1991)**

**Keywords:** *active galactic nuclei; BL Lac objects; QSOs*

**Description:** This catalog is an update to the older catalog of quasars and active nuclei. It now

contains 6225 quasars and 1540 active galaxies (of which 757 are Seyfert 1, as compared to 4169 quasars and 1108 Seyfert and related galaxies in the fourth edition of this catalog. This catalog contains positions, redshift, photometry (U, B, V), and 6 and 11 cm flux densities. This catalog also contains 162 BL Lac objects as opposed to 117 in the last edition. A quasar is arbitrarily defined as a star-like object or an object with a star-like nucleus, brighter than absolute magnitude -23. This catalog is believed to be complete for quasars, BL Lac objects, and Seyfert 1 galaxies.

**Reference:**

Véron-Cetty, M.-P., and Véron, P. 1991, ESO Sci. Rep. No. 10

**File Information:** 5 files, 934 Kbytes      **Status:** Has been checked for consistency  
Available via network

**ADC 7147**

Kodaira, K., et al.

**Photometric Catalog of Northern Bright Galaxies (1992)**

**Keywords:** *galaxy catalogs; magnitudes*

**Description:** This catalog presents homogeneous photometric parameters of 791 northern bright galaxies based on surface photometry. The observations were made with the 105 Schmidt telescope at Kiso Observatory in the photographic V band, mostly during 1984-1988. This catalog is the first machine-readable version of Part II of the *Photometric Atlas of Northern Bright Galaxies* (Kodaira et al. 1990). The fields in the catalog include galaxy name, position (B1950), morphological type, radial velocity, galactic V-band absorption, effective radius, apparent magnitude, and parameters of the ellipse fitted to the photometric galaxy image.

**References:**

Kodaira, K., Okamura, S., Ichikawa, S., Hamabe, M., and Watanabe, M. 1992, *National Astron. Obs. of Japan*

Kodaira, K., Okamura, S., Ichikawa, S., Hamabe, M., and Watanabe, M. 1990 (Tokyo: Univ. Tokyo Press)

**File Information:** 3 files, 110 Kbytes      **Status:** Has been checked for consistency  
Available via network  
Description for machine version

**ADC 7148**

Warren, S.J., Hewett, P.C., and Osmer, P.S.

**A Wide-Field Multicolor Survey for High-Redshift Quasars, z 2.2 II. The Quasar Catalog (1991)**

**Keywords:** *galaxy catalogs; QSOs*

**Description:** In a wide-field multicolor survey (45.7 sq. deg, with  $m_{\text{[or]}}$  between 16.0m and 20.0m) the authors discovered 130 new quasars of which 100 are of redshift  $\geq 2.2$ . There are 49 new quasars

of redshift  $\geq 3.0$ , including three with  $z \geq 4.0$ . The catalog provides spectra, coordinates, redshifts, broad-band magnitudes (u,  $b_j$ , v, or, r, i), line-equivalent widths for Lyman  $\alpha$ /NV and CIV, and continuum spectral indices. Also given are the date of observation, the telescope used, a reference to the plot in the printed reference, and the FWHM of CIV.

**Reference:**

Warren, S.J., Hewett, P.C., and Osmer, P.S. 1991, *ApJS*, 76, 23

**File Information:** 4 files, 55.5 Kbytes      **Status:** Has been checked for consistency  
Available via network  
Full documentation available

**ADC 7149**

Schneider, D.P., et al.

**Accurate Positions of 528 High-Redshift, Luminous Quasars from the HST Snap-Shot Survey (1992)**

**Keywords:** *positional data; QSOs; redshifts; surveys*

**Description:** The non-proprietary HST Snapshot Survey produced Planetary Camera images of high-redshift, luminous quasars. The aim of the program is to determine the frequency of multiple imaged QSOs down to angular scales of  $0.15''$ . Detailed descriptions of the program are given in Bachall et al. (1992) and Maoz et al. (1992). The sample was taken from the 3rd and 4th editions of the catalog of Véron-Cetty and Véron (1987, 1989). The target positions taken from these catalogs were fed to the STScI Guide Star Astrometric Support Program (GASP), to generate revised positions from regions extracted from the STScI's digitized sky survey. The printed version of the catalog does not contain the Véron 1950 coordinates nor the difference between these and the GASP derived 1950 coordinates that are contained in this version.

**References:**

- Schneider, D.P., Bahcall, J.N., Saxe, D.H., Bahcall, N.A., Doxsey, R., Golombek, D., Krist, J., McMaster, M., Meakes, M., and Lahav, O. 1992, *PASP*, 104, 678
- Bachall, J.N., Maoz, D., Doxsey, R., Schneider, D.P., Bachall, N.A., Lahav, O., and Yanny, B. 1992, *ApJ*, 387, 56
- Maoz, D., Bachall, J.N., Doxsey, R., Schneider, D.P., Bachall, N.A., Lahav, O., and Yanny, B. 1992, *ApJ*, 394, 51
- Véron-Cetty, M.P., and Véron, P. 1987, A Catalog of Quasars and Active Nuclei, 3rd Edition, ESO Scientific Report No. 5, Munich
- Véron-Cetty, M.P., and Véron, P. 1989, A Catalog of Quasars and Active Nuclei, 4th Edition, ESO Scientific Report No. 7, Munich

**File Information:** 4 files, 97.4 Kbytes      **Status:** Has been checked for consistency  
Available via network  
Full documentation available

**ADC 7150**

Takase, B., and Miyauchi-Isobe, N.

**Kiso Survey for Ultraviolet-Excess Galaxies. I - XVI (1984-1992)****Keywords:** *UV-excess galaxies; surveys*

**Description:** The catalog was created by merging 16 published data sets. (See references.) The data were sorted by order of right ascension. Duplicate objects were listed multiple times. Included are *KUG* name, component designation, B1950 position, morphological type, major and minor diameters, apparent magnitude, degree of UV excess, cross identifications, *KUG* catalog number, Kiso sky area number, running number in each sky area. The accompanying documentation includes a table of the sky areas scanned in the survey.

**Reference:**

Takase, B., and Miyauchi-Isobe, N. 1984-1992, *Ann. Tokyo Astron. Obs.*, **19**, 565; **20**, 237, 335; **21**, 127, 181, 251, 363; **22**, 41; *Publ. Natl. Astron. Obs. Jpn.*, **1**, 11, 97, 181; **2**, 7, 37, 239, 399, in press

**File Information:** 2 files, 1.01 Mbytes**Status:** Is distributed as received

Available via network

Description for machine version

**ADC 7157**

Rush, B., Malkan, M., and Spinoglio, L.

**The Extended 12 Micron Galaxy Sample (1993)****Keywords:** *IR galaxies; Seyfert galaxies; infrared sources; nonstellar objects; surveys*

**Description:** The authors have used the IRAS data to compile an all-sky sample of 893 galaxies, including 118 Seyfert galaxies. ADD/SCANPI integrated fluxes at 12, 25, 60, and 100  $\mu$  from the IRAS survey are given together with redshifts and 1950 coordinates. Also given are the name from various extragalactic catalogs, a reference for the redshift, and the object type. The sample is 12-micron-flux-limited at 0.22 Jy and is complete down to a 12  $\mu$  flux of 0.30 Jy.

**Reference:**

Rush, B., Malkan, M., and Spinoglio, L. 1993, *ApJS*, in press

**File Information:** 4 files, 134 Kbytes**Status:** Has been checked for consistency

Available via network

Full documentation available

**ADC 7158**

Hewitt, A., and Burbidge, G.

**A Revised and Updated Catalog of Quasi-Stellar Objects (1993)****Keywords:** *BL Lac objects; QSOs; redshifts; combined data*

**Description:** The catalog contains all known quasistellar objects (QSOs) with measured emission redshifts, and BL Lac objects, complete to 31 December 1992. There are 7315 objects listed in the catalog, nearly all QSOs including about 90 BL Lac objects. The catalog defines QSO nature based on a redshift  $z$  larger than 0.1. Included in the catalog and references are extensive information on names, positions, magnitudes, colors, emission-line redshifts, absorption, variability, polarization, and X-ray, radio, and infrared data. A key in the form of subsidiary tables enables the reader to relate the name of a given object to its coordinate name, which is used throughout the compilation. The catalog is a complete revision and extension of Hewitt and Burbidge (1987, 1989).

**References:**

- Hewitt, A., and Burbidge, G. 1993, *ApJS*, 87, 451  
 Hewitt, A., and Burbidge, G., 1987, *ApJS*, 63, 1  
 Hewitt, A., and Burbidge, G., 1989, *ApJS*, 69, 1

**File Information:** 7 files, 5.72 Mbytes      **Status:** Is distributed as received  
 Available via network  
 Description for machine version

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## 3.8 Radio Sources

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**ADC 8003**

Burbidge, G., and Crowne, A.H.

### An Optical Catalogue of Radio Galaxies (1979)

**Keywords:** *radio galaxies; redshifts; radio sources; galaxy catalogs*

**Description:** This catalog contains basic optical information on all known radio galaxies (with  $L[\text{radio}]$  greater than about  $10^{11}$  ergs/s) that had been identified as of 1979 and for which measured redshifts were available. The data include the right ascension and declination (1950); galaxy (optical) type; visual magnitude; photoelectric colors; redshift ( $z$ ) and the spectral lines on which the redshift measurements were based; coordinate designations; radio flux and frequency; radio spectral index; other names; and the references for the galaxy identification, photometric data, redshift, radio flux, radio spectral index, and radio map number. Note that the ADC version of this catalog differs somewhat from the original printed catalog in that some fields were added or modified and other fields reordered. In addition to the catalog data file itself, two additional files containing the list of references for the catalog are also available. The first reference list is in alphabetical order, and the second is in numerical order. Additional documentation is also available offline.

**Reference:**

- Burbidge, G., and Crowne, A.H. 1979, *ApJS*, 40, 583

**File Information:** 3 files, 236 Kbytes      **Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

**ADC 8004**

Pilkington, J.D.H., and Scott, P.F.

**The Fourth Cambridge Survey of Radio Sources (1965)**

**Keywords:** *surveys; radio sources*

**Description:** The machine-readable 4C catalog contains all survey data from the source references. The data included for each source are 4C number, right ascension and declination (equinox B1950), flux density at 178 MHz, numerical and letter codes for position and flux density error class, galactic coordinates, and remarks. The only remarks actually given in the machine file are cross identifications to 3C and 3CR sources; however, a flag (\*) is included if there are additional remarks in the published catalog.

**References:**

Pilkington, J.D.H., and Scott, P.F. 1965, *MmRAS*, 69, 183

Gower, J.F.R., Scott, P.F., and Wills, D. 1967, *MmRAS*, 71, 49

**File Information:** 2 files, 383 Kbytes      **Status:** Has been checked for consistency  
Available via network  
Available on CD-ROM  
Full documentation available

**ADC 8005**

Kühr, H., et al.

**A Catalogue of Extragalactic Radio Sources Having Flux Densities Greater Than 1 Jy at 5 GHz (1981)**

**Keywords:** *radio galaxies; radio sources; galaxy catalogs*

**Description:** The catalog is a compilation of 518 extragalactic radio sources with flux densities greater than 1 Jy at 5 GHz. It contains sources from the NRAO-MPI 5-GHz Strong Source Surveys and from re-observation at 5 GHz of sources found in the Parkes 2.7-GHz surveys. All sources were found in 9.811 sr covered by the two surveys. This is essentially the whole sky, excluding the galactic plane (latitudes  $< 10^\circ$ ) and the Magellanic Clouds. The catalog includes radio flux densities, radio positions, object classes, visual magnitudes, redshifts, and spectral indices.

**Reference:**

Kühr, H., Witzel, A., Pauliny-Toth, I.I.K., and Nauber, U. 1981, *A&AS*, 45, 367

**File Information:** 2 files, 433 Kbytes      **Status:** Has been checked for consistency  
Documentation in hard copy form only  
Available via network

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**ADC 8006**

Condon, J.J., and Broderick, J.J.

A 1400-MHz Sky Survey. Confusion Limited Maps Covering Declination  $-5^{\circ}$  to  $+82^{\circ}$  (1985)

**Keywords:** *radio sources; surveys*

**Description:** The survey contains 144 maps that cover the declination zone  $-5^{\circ}$  to  $+82^{\circ}$  from the National Radio Astronomy Observatory (NRAO) 1400-MHz survey. The observations were made during 1983 April 2-21, with the rebuilt four-feed receiver on the NRAO 91-m transit telescope in Green Bank. Its resolution is  $12.7' \times 11.1'$ . These maps contain 3000 sources per sr stronger than 0.15 Jy, which is six times the rms noise. They are available in the Flexible Image Transport System (FITS) standard and can be studied with standard Astronomical Image Processing System (AIPS) display and analysis programs.

**References:**

Condon, J.J., and Broderick, J.J. 1985, *AJ*, **90**, 2541

Condon, J.J., and Broderick, J.J. 1986, *AJ*, **91**, 1051

**File Information:** 2 files, 433 Kbytes

**Status:** Has been checked for consistency  
Description for machine version

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**ADC 8007**

Heiles, C., and Habing, H.J.

The Hat Creek High-Latitude H I Survey (1974)

**Keywords:** *radio sources; surveys; H I data*

**Description:** This survey consists of H I 21-cm spectra covering the entire northern sky with absolute galactic latitude  $|b| > 10^{\circ}$  and declination  $\text{dec} > -30^{\circ}$ . The observations were made with the Hat Creek 85-foot telescope between 1968 and 1970. The individual spectra were obtained with a bank of 100 filters covering the velocity range from  $-92$  km/s to  $+75$  km/s. The velocity resolution was 2 km/sec (except at the ends of the spectra) and the beamwidth was  $36'$ . The spacing between points observed on the sky is  $(0.3^{\circ}/\cos b)$  in galactic longitude and  $(0.6^{\circ})$  in galactic latitude. Each spectrum or record consists of a header followed by 100 antenna temperatures. The header contains the galactic longitude, galactic latitude, right ascension, declination, date, local standard time, central velocity (lsr), and status. The catalog contains a total of 134932 spectra. Additional off-line documentation and additional off-line software for reading and interpreting the data are also available.

**References:**

Heiles, C., and Habing, H.J. 1974, *A&AS*, **14**, 1

Heiles, C. 1974, *A&AS*, **14**, 557

Heiles, C., and Jenkins, E.B. 1976, *A&A*, **46**, 333

**File Information:** 1 file, 82.7 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Description for machine version

**ADC 8008**

Cleary, M.N., Heiles, C., and Haslam, C.G.T.

### The Parkes High-Latitude H I Survey (1979)

**Keywords:** *radio sources; surveys; H I data*

**Description:** This survey consists of H I 21-cm spectra covering the southern sky with absolute galactic latitude  $|b| \geq 10^\circ$  and declination  $\leq -30^\circ$ . The observations were made with the Parkes Radio Observatory (CSIRO) 60-foot telescope. The receiver back end was the Parkes 64-channel spectrometer. The velocity resolution was 7 km/sec (33 kHz) and the beamwidth (HPBW) was 48'. Drift scans at constant declination were used with continuous integration in right ascension for  $-80^\circ \leq \text{Dec} \leq -30^\circ$ . For declination  $< -80^\circ$  a grid of positions spaced  $1^\circ$  apart in declination and one beam-width apart in right ascension were observed. The survey was made in two parts. Part 1 included  $b \geq -25^\circ$ ,  $|b| \geq 10^\circ$  and declination  $\leq -30^\circ$ . Part 2 included  $b \leq -25^\circ$  and declination  $\leq -30^\circ$ . The scans in Part 1 were spaced at  $1^\circ$  intervals in declination and the velocity coverage was from -148 to +300 km/sec. The scans in Part 2 were spaced at  $2^\circ$  and the velocity coverage was from -230 to +218 km/sec. Each spectrum or record consists of a header followed by 64 antenna temperatures. The header contains the galactic longitude, galactic latitude, right ascension, declination, central velocity (LSR), and quality factor. The catalog contains a total of 9891 spectra. Additional off-line documentation and additional off-line software for reading and interpreting the data are also available.

**References:**

Cleary, M.N., Heiles, C., and Haslam, C.G.T. 1979, *A&AS*, **36**, 95

Heiles, C., and Cleary, M.N. 1979, *Aust. J. Phys. Astrophys. Suppl.* No. 47

**File Information:** 1 file, 3.96 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Description for machine version

**ADC 8009**

Colomb, F.R., Poppel, W.G.L., and Heiles, C.

### The Argentina High-Latitude H I Survey (1980)

**Keywords:** *radio sources; surveys; H I data*

**Description:** This survey consists of H I 21-cm spectra covering the southern sky with absolute galactic latitude  $|b| > 10^\circ$  and a declination  $< -25^\circ$ . The observations were made with the 30 m telescope of the Instituto Argentino de Radioastronomia during 1973 to 1977 and were described in Colomb et al. 1977. The data were obtained by keeping the telescope fixed on the meridian at the desired declination and letting the sky drift through the field. The individual spectra were obtained with a 56-channel filterbank and covering the velocity range from about -40 to +40 km/sec. The velocity resolution is 2 km/sec, and the beamwidth is 30'. Each spectrum or record consists of a

header followed by 56 antenna temperatures. The header contains the galactic longitude, galactic latitude, right ascension (1950), declination (1950), date (local standard time), date of observation (year, month, day), bad scan information, velocity (LSR) of channel 1, velocity (LSR) of channel 56, and a quality factor. The catalog contains a total of 55470 spectra. Additional off-line documentation and off-line software for reading and interpretation of the data are also available.

**References:**

Colomb, F.R., Poppel, W.G.L., and Heiles, C. 1980, *A&AS*, 40, 47

Colomb, F.R., Poppel, W.G.L. and Heiles, C. 1997, *ApJS*, 29, 89

**File Information:** 1 file, 20.9 Mbytes      **Status:** Has been checked for consistency  
Available via network  
Description for machine version

**ADC 8011**

Weaver, H., and Williams, D.R.W.

**The Berkeley Low-Latitude Survey of Neutral Hydrogen (1973)**

**Keywords:** *radio sources; surveys; H I data*

**Description:** This survey consists of H I 21-cm spectra covering galactic latitudes from  $-10^\circ$  to  $+10^\circ$  and galactic longitudes from  $10^\circ$  to  $250^\circ$ . The observations were made with the Hat Creek 85-foot telescope between 1968 and 1970. The individual spectra contain 238 points per profile and cover a velocity range of 250 km/s. The velocity resolution is 2 km/sec (half-power of each filter) and the half-power beamwidth is  $35'$ . The spacing between points observed on the sky are  $0.25^\circ$  in galactic latitude and  $0.5^\circ$  in galactic longitude. Each spectrum or record consists of a header followed by 238 antenna temperatures. The header contains the galactic longitude, galactic latitude, and central velocity (lsr). The catalog contains a total of 38961 spectra. Additional off-line documentation and additional off-line software for reading and interpreting the data file are also available.

**Reference:**

Weaver, H., and Williams, D.R.W. 1973, *A&AS*, 8, 1

**File Information:** 1 file, 44.7 Mbytes      **Status:** Has been checked for consistency  
Available via network  
Description for machine version

**ADC 8014**

Gregory, P.C., and Condon, J.J.

**The 87GB Catalog of Radio Sources Covering  $0^\circ < \text{Dec} < +75^\circ$  at 4.85 GHz (1990)**

**Keywords:** *radio sources*

**Description:** The Green Bank 300-foot (91 m) telescope was used during October 1987 to map 6.0 sr of sky in the  $0^\circ$  to  $+75^\circ$  declination band at 4.85 GHz. The 87GB catalog of 54579 discrete sources

with angular sizes  $< 10.5'$  and flux densities larger than  $S \approx 25\text{-}40$  mJy was derived from these maps. The catalog positions and flux densities have been corrected for known map biases. Their estimated uncertainties were verified by comparisons with more accurate positions and flux densities available for some sources. The file names specify the equinox and hour of right ascension; e.g., B1950.00H or J2000.23H. The data also give the sources' galactic latitudes and longitudes, fitted major axes, minor axes, and position angles, the local sky levels (baseline zero offsets of the Gaussian fits), and map pixel coordinates.

**Reference:**

Gregory, P.C., and Condon, J.J. 1990, NRAO Preprint 90/91

**File Information:** 7 files, 108 Kbytes      **Status:** Has been checked for consistency  
 Available via network  
 Description for machine version

**ADC 8017**

White, R.L., and Becker, R.H.

**The 1.4-GHz Northern Sky Catalog (1992)**

**Keywords:** *radio sources*

**Description:** This catalog contains a list of 30239 1.4 GHz radio sources over the declination range of  $-5^\circ$  to  $82^\circ$ . This catalog is based on the Green Bank 1.4 GHz Northern Sky Survey (Condon and Broderick 1985, 1986), which was generated using the Green Bank 300 foot (91m) telescope. The threshold for identifying a 1.4 GHz radio source was set at 100 mJy. The catalog data include the source name, a confusion flag, right ascension (1950), declination (1950), 1.4 GHz flux, a flag to indicate if the source is extended at 20 cm, 4.85 GHz flux (from Becker et al. 1991), a flag to indicate if the source is extended at 6 cm, 0.365 GHz flux (from Douglas et al. 1980), spectral index between 6 and 20 cm, and spectral index between 20 and 80 cm. Where possible, the source name is derived from the 6 cm catalog of Becker et al. 1991.

**References:**

- White, R.L., and Becker, R.H. 1992, *ApJS*, 79, 331  
 Becker, R.H., White, R.L. and Edwards, A.L. 1991, *ApJS*, 75, 1  
 Condon, J.J., and Broderick, J.J. 1986, *AJ*, 91, 1051  
 Douglas, J.N., Bash, F.N., Torrence, G.W., and Wolfe, C. 1980, *Univ. Tex., Publ. Astron.*, No. 17  
 Condon, J.J., and Broderick, J.J. 1985, *AJ*, 90, 2540

**File Information:** 2 files, 2.08 Mbytes      **Status:** Has been checked for consistency  
 Available via network  
 Description for machine version

**ADC 8018**

Baldwin, J.E., et al.

**The 6C Survey of Radio Sources - I. Declination Zone Dec  $> 80^\circ$  (1985)**

**Keywords:** *radio sources; surveys*

**Description:** This catalog contains the first section of the 6C Cambridge survey of radio sources at 151 MHz. This part of the survey covers the region north of a declination of  $80^\circ$ . This survey has an angular resolution of  $4.2' \times 4.2' \times \text{cosec}(\text{dec})$  (half-power at map center) and a limiting flux density of 120 mJy at 151 MHz. Data include the source positions (B1950), peak flux density, integrated flux density, and contour map number. This part of the survey contains 1761 sources.

**Reference:**

Baldwin, J.E., Boysen, R.C., Hales, S.E.G., Jennings, J.E., Waggett, P.C., Warner, P.J., and Wilson, D.M.A. 1985, MNRAS, 217, 717

**File Information:** 4 files, 94.6 Kbytes      **Status:** Has been checked for consistency  
Available via network  
Full documentation available

**ADC 8019**

Wieringa, M.H.

**Catalogue from a Deep 327 MHz Westerbork Survey (1991)**

**Keywords:** *radio sources; surveys*

**Description:** This catalog presents the results of a deep survey of six fields with the Westerbork Synthesis Radio Telescope at 327 MHz. In total, 4500 sources brighter than the 5-sigma noise level were detected. (This varies from 2.4-3.5 mJy/beam, over an area of 95 square degrees.) For these fields 608 MHz observations were already available. The source catalog at both frequencies, derive source counts, and spectral indices are presented. The data were calibrated using the DWARF redundancy package and absolute calibration based on 3C286, using an assumed flux of 26.93 Jy at 327 MHz and 21.47 Jy at 608 MHz. The source parameters were determined using a gaussian fitting procedure for all but the most complex sources, and statistical corrections for noise bias were applied. Data include the Westerbork name and source number, source positions (B1950), flux density, source structure code, axes of fitted gaussians, mean error in PA, signal to noise ratio, primary beam attenuation, and statistical weight.

**References:**

Wieringa, M.H. 1991, Thesis, Leiden Obs.  
Wieringa, M.H. 1993, CDS Bull. No. 43, p. 17

**File Information:** 17 files, 1.72 Mbytes      **Status:** Is distributed as received  
Available via network  
Full documentation available

**ADC 8020**

Haynes, R.F., Caswell, J.L., and Simons, L.W.J.

**A Catalogue of 5 GHz Galactic Plane Sources (1979)**



## ADC 8022

Hales, S.E.G., et al.

The 6C Survey of Radio Sources - III  
 The Zone  $48^\circ < \text{Dec} < 68^\circ$ ,  $05^h 25^m < \text{RA} < 18^h 17^m$  (1990)

**Keywords:** *radio sources; surveys*

**Description:** This catalog contains the third section of the 6C Cambridge survey of radio sources at 151 MHz. This part of the survey covers the region from  $48^\circ$  to  $68^\circ$  in declination and between  $05^h 25^m$  and  $18^h 17^m$  in right ascension. This survey has an angular resolution of  $4.2' \times 4.2' \times \text{cosec}(\text{dec})$  (half-power at map center). The limiting flux density varies from 160 mJy to 600 mJy as a function of map and declination. Data include the source positions (B1950), peak flux density, integrated flux density, the panel number and field names of the contour map. This part of the survey contains 8749 sources, covering an area of 1950 square degrees.

**Reference:**

Hales, S.E.G., Masson, C.R., Warner, P.J., and Baldwin, J.E. 1990, MNRAS, 246, 256

**File Information:** 4 files, 444 Kbytes      **Status:** Has been checked for consistency  
 Available via network  
 Full documentation available

## ADC 8023

Hales, S.E.G., et al.

The 6C Survey of Radio Sources - IV  
 The Zone  $67^\circ < \text{Dec} < 82^\circ$ ,  $0^h < \text{RA} < 24^h$  (1991)

**Keywords:** *radio sources; surveys*

**Description:** This catalog contains a section of the 6C Cambridge survey of radio sources at 151 MHz, covering the region from  $67^\circ$  to  $82^\circ$  in declination and between  $0^h$  and  $24^h$  in right ascension. The survey has an angular resolution of  $4.2' \times 4.2' \times \text{cosec}(\text{dec})$ . Data include the source positions (B1950), peak flux density, integrated flux density, the panel number and field names of the contour map. The limiting flux density is 160 mJy at 151 MHz in the present zone with completeness achieved at 400 mJy on the best maps and at about 800 mJy on the worst. This part of the survey contains 5421 sources, covering an area of 1440 square degrees.

**Reference:**

Hales, S.E.G., Mayer, C.J., Warner, P.J., and Baldwin, J.E. 1991, MNRAS, 251, 46

**File Information:** 4 files, 287 Kbytes      **Status:** Has been checked for consistency  
 Available via network  
 Full documentation available

**ADC 8024**

Hales, S.E.G., et al.

**The 6CV Survey of Radio Sources - V**  
**The Zones 6C-Va ( $48^\circ < \text{Dec} < 68^\circ$ ,  $0^h 34^m < \text{RA} < 6^h 14^m$ ) and**  
**6C-Vb ( $48^\circ < \text{Dec} < 68^\circ$ ,  $17^h 16^m < \text{RA} < 20^h 24^m$ ) (1993)**

**Keywords:** *radio sources; surveys*

**Description:** This catalog contains the fifth section of the 6C Cambridge survey of radio sources at 151 MHz (6CV). This part of the survey covers two regions: from  $48^\circ$  to  $68^\circ$  in declination,  $01^h 34^m$  to  $06^h 14^m$  and from  $17^h 16^m$  to  $20^h 24^m$  in right ascension. The limiting flux density is generally 170 mJy. The catalog data include the source positions (B1950), peak flux density, integrated flux density, contour map panel number, contour map field names and integrated flux flag. The two regions together list a total of 3458 sources (2229 in 6CVa and 1229 sources in 6CVb). The 6CV catalog consists of two files: one file contains the 6CVa and the second file contains the 6CVb.

**Reference:**

Hales, S.E.G., Masson, C.R., Warner, P.J., Baldwin, J.E., and Green, D.A. 1993, *MNRAS*, **262**, 1057

**File Information:** 5 files, 211 Kbytes      **Status:** Has been checked for consistency  
 Available via network  
 Full documentation available

**ADC 8025**

Hales, S.E.G., Baldwin, J.E., and Warner, P.J.

**The 6C Survey of Radio Sources - VI**  
**The Continuous Zone  $30^\circ < \text{Dec} < 51^\circ$ ,  $00^h < \text{RA} < 09^h 05^m$  and**  
 **$22^h 35^m < \text{RA} < 24^h$  (1993)**

**Keywords:** *radio sources; surveys*

**Description:** This catalog contains the sixth section of the 6C Cambridge survey of radio sources at 151 MHz (6CV). This part of the survey covers the region  $30^\circ < \text{Dec} < 51^\circ$ ,  $00^h < \text{RA} < 09^h 05^m$  and  $22^h 35^m < \text{RA} < 24^h$ . The catalog data include the source positions (B1950), peak flux density, integrated flux density, contour map panel number, contour map field names, and an integrated flux flag. This catalog contains a list of 6752 sources in 2440 square degrees.

**Reference:**

Hales, S.E.G., Baldwin, J.E., and Warner, P.J. 1993, *MNRAS*, **263**, 25

**File Information:** 4 files, 378 Kbytes      **Status:** Has been checked for consistency  
 Available via network  
 Full documentation available



# Chapter 4

## Keyword Index for ADC Catalogs

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Kinney, A.L. ....	3157 3167
Kireeva, N.N. ....	2139 2140 2172
Kjaergaard, P. ....	3079A
Klare, G. ....	2034 2062
Klauder, H. ....	1016
Kleinmann, S.G. ....	3114
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	1200
Klinglesmith, D.A. ....	7094
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Kolesnik, L.N. ....	2132
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Kox, H. ....	1016
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Krist, J. ....	7149
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Kühr, H. ....	1169 8005

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Kuijken, K. ....	3151			
Kuji, S. ....	5069			
Kukarkin, B.V. ....	2140			
Kukarkina, N.P. ....	2139	2140		
Kumkova, I.I. ....	1169			
Kurochkin, N.E. ....	2139	2140		
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Kurucz, R.L. ....	6010	6033	6039	
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Lanning, H. ....	3159			
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Large, M.I. ....	8002	8016		
Larink, J. ....	1016			
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Latham, D.W. ....	5054			
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Leggett, S.K. ....	6049			
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Leir, A.A. ....	3029B	7087A		
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Lesh, J.R. ....	2096	3023B	5009	5010
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Lomb, N.R. ....	1086A					
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Lu, L. ....	1181	1182				
Lubowich, D.A. ....	6056					
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Lukac, C.F. ....	1073B	1090				
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Luyten, W.J. ....	1054	1087	1098A	1130	3049	3074
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MacGillivray, H.T. ....	2130					
Madejsky, R. ....	2170					
Maehara, H. ....	2106					
Magenat, P. ....	2007A	2015	2017A	2018	2038	2039
Maki, T. ....	7140					
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Malkov, O.Yu. ....	2171	5060	5063	5075		
Mallama, A.D. ....	2143					
Maluendes, S. ....	6059					
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Mandel, H. ....	2170					
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Marcout, J. ....	5078	6014	7024A	
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Martin, N. ....	3105	3111	3147	
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Massey, P. ....	3116	3136	3143	
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Meeking, J.F. ....	7080			

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Mendez, M.E. ....	3045						
Mennessier, M.O. ....	1191	1196					
Mermilliod, J.C. ....	1191	1196	2063	2104	2122A	2124A	
	2163	2164	2165	2166	2167	2168	
	3055	3097A	4001	4007	4017A	6005	
Mermilliod, M. ....	2063	2074	2128	2158A	2167	3165	
Metcalf, N. ....	7042A						
Michel, A. ....	7144						
Middelkoop, F. ....	3159						
Mihalas, D. ....	3159						
Miller, E.W. ....	6001						
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Morin, D. ....	1191	1196	5003				
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	4906						
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Osmer, P.S. ....	7148				
Otrupcek, R. ....	8015				
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Palumbo, G.G.C. ....	7070A	7071	7099		
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Pasinetti, L.E. ....	2061				
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Peach, J.V. ....	7042A				
Pease, G. ....	5031				
Peat, D.W. ....	2022	2024	2025	3025	3026
Pedoussant, A. ....	4016	5049	5060		
Peimbert, M. ....	3084B				
Pemberton, A.C. ....	3025	3026			
Pence, W.D. ....	7039A				
Penston, M.J. ....	1085	5032			
Perault, M. ....	2148				
Perinotto, M. ....	3030A	3130			
Perova, N.B. ....	2139	2140			
Perry, C.L. ....	2088B	2100	2138	2901	
Persson, S.E. ....	7075				
Perth Observatory ....	1062C	1097	1168	1916	1917
Peters, G. ....	7018				
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Peytreman, E. ....	6010				
Philip, A.G.D. ....	2037	5012	5014	5023	
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Pickering, E.C. ....	3135				
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Polojentsseva, T.A. ....	1082				
Polozhentsev, D.D. ....	1159A	1193			
Ponomareva, G.A. ....	2140				
Popova, E. ....	5041				
Poppel, W.G.L. ....	8009				
Popper, D.M. ....	5063				
Porter, A. ....	3159				
Potter, K.H. ....	1193				
Potter, Kh.I. ....	1159A				

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Pounds, K.A. ....	7019	7058				
Preston, G.W. ....	3159					
Prévot, L. ....	1191	1196	3105	3111	3147	
Price, S.D. ....	2094					
Ptolemy, C. ....	5061					
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Renson, P. ....	3152	3162A				
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Röser, S. ....	1146	1154	1159A	1193	1194	3155
Rössiger, S. ....	6052	6058				
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Ruprecht, J. ....	7005A	7031A	7044A	7101	
Rush, B. ....	7157				
Russell, J.L. ....	1151	1158	1197	2143	
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Santiago-Pulkovo ....	1044	1078	1082		
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Schneider, D.P. ....	7149				
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Struble, M.F. ....	7056	7095	7096	
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Taraji, H. ....	1152	1153		
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Theile, I. ....	3076			
Theévenin, F. ....	3165			
Thomas, N.G. ....	1079	1112		
Thome, J.M. ....	1114			
Thompson, D.J. ....	7130			
Thompson, G.I. ....	2059B	3039A		
Thompson, L. ....	2086			
Tiersch, H. ....	7089A			
Tift, W.G. ....	7001B			
Tokarz, S.P. ....	7144			
Tonry, J. ....	2174			
Tonry, J.L. ....	7072			
Torres, A.V. ....	3136			
Torres-Dodgen, A.V. ....	3143			
Torres-Peimbert, S. ....	3084B			

Author	Catalog(s)			
Toulouse .....	1055			
Tritton, S.B. ....	7138			
Tsvetkov, D. Yu. ....	2176			
Tsvetkova, T.M. ....	2172			
Tucker, R.H. ....	1144			
Tully, R.B. ....	7075			
Turatto, M. ....	2103	2159		
Turner, B.E. ....	6056			
Turner, M.J.L. ....	7019			
Turon, C. ....	1191	1196	1197	
Tutukov, A. ....	5041			
Tuzi, K. ....	1038			
UCO/Lick Observatory .....	1199	1200		
Uesugi, A. ....	3063B			
Upgren Jr., A.R. ....	3009A	3010A	3011A	3012A
Urban, S.E. ....	1171			
Usher, P.D. ....	2115	7063		
Valentijn, E.A. ....	7115			
Valitova, A.M. ....	1150			
van Albada-van Dien, E. ....	1128			
van Altena, W.F. ....	1174			
van den Bergh, S. ....	2133	7021	7087A	
van der Hucht, K.A. ....	3085	3141		
van Duinen, R.J. ....	2097			
Van Flandern, T.C. ....	1162	1163		
van Veerden, J.E. ....	2148			
Van Wickler, K. ....	6034			
van Woerden, H. ....	7075			
vander Linden, D. ....	2170			
Vanýsek, V. ....	7005A			
Vasilevskis, S. ....	1011			
Vaughan, A.H. ....	3159			
Véron, P. ....	7054	7126	7146	
Véron-Cetty, M.-P. ....	7054	7126	7146	
Verter, F. ....	7064	7139		
Vettolani, G. ....	7070A	7071	7099	
Vigneau, J. ....	5013A	5060		
Vincent, A. ....	1074			
Vincent, M. ....	1074			
Viotti, R. ....	6048			

Author	Catalog(s)					
Virdefors, B. ....	3069A					
Vogt, N. ....	7005A					
Voigt, H.H. ....	3076					
von der Heide, J. ....	1062C	1916	1917			
Vorontsov-Velyaminov, B.A. ....	7062					
Vyssotsky, A.N. ....	3013					
Wackerling, L.R. ....	3017B					
Waggett, P.C. ....	8018					
Walborn, N.R. ....	3115					
Walker, D.W. ....	7073					
Wallenquist, Aa. ....	2101					
Walter, H.G. ....	1169	5067				
Walther, M.E. ....	3013					
Walther, S.J. ....	3013					
Walton Mayall, M. ....	3138	3155				
Wamsteker, W. ....	2065					
Warner, P.J. ....	8018	8021	8022	8023	8024	8025
Warnock III, A. ....	2115	7063				
Warren Jr., W.H. ....	1071	1098A	1903	2036	3089	4019
	4914	4915	5050	6029	6034	
Warren, S.J. ....	7148					
Warwick, R.S. ....	7058					
Washington ....	1100	1101	1102	1103	1104	1105
	1106	1107				
Watanabe, M. ....	7147					
Watanabe, T. ....	7140					
Watson, M.G. ....	7019	7058				
Watts, C.B. ....	1101	1102	1103			
Weaver, H. ....	8011					
Webbink, R.F. ....	7151					
Weedman, D.W. ....	7047					
Wegner, W. ....	2175					
Weiss, G. ....	3093					
Weistrop, D. ....	2087					
Weltz, D.E. ....	2149					
Wendker, H.J. ....	2129	2147				
Wenzel, W. ....	6035	6038				
Wesselius, P.R. ....	2097	2114	2148	7057		
West, R.M. ....	6030					
White, E.J. ....	1156					

Author	Catalog(s)				
White, N.E. ....	6043				
White, R.E. ....	2037	3089	7031A	7044A	7101
White, R.L. ....	8013	8017			
Whitmore, B.C. ....	7072				
Wielen, R. ....	1159A	1193			
Wieringa, M.H. ....	8019				
Wiese, K. ....	3155				
Wild, P. ....	7004A	7049			
Wildeman, K.J. ....	2097				
Williams, D.R.W. ....	8011				
Williams, J.G. ....	1091				
Wills, D. ....	8004				
Wilson, D.M.A. ....	8018				
Wilson, O.C. ....	3159				
Wilson, R. ....	2059B	2086	3039A		
Wilson, R.E. ....	3021				
Wilson-Diaz, D. ....	3158				
Wirtanen, C.A. ....	1011				
Wisniewski, W.Z. ....	2005	2143			
Witzel, A. ....	1169	8005			
Wlasuk, P. ....	5036B				
Wolter, A. ....	7152				
Wood, F.B. ....	6031	6044			
Wood, K.S. ....	7080				
Woodard, L. ....	3159				
Woodman, J.H. ....	3109				
Woods, T. ....	5068				
Woolley, R.v.d.R. ....	5032				
Working Group of CGSC ....	1179				
Working Group of GCPA ....	1180				
Worley, C.E. ....	1107	5039			
Wray, J.D. ....	3086				
Wright, A.E. ....	8015				
Wu, C.-C. ....	3158				
Wyse, R.F.G. ....	3167				
Yagudin, L.I. ....	1138	1159A	1193	1195	
Yahil, A. ....	2174				
Yale University ....	1060B	1081	1092	1141	1174
Yates, F.F. ....	2096				
Yatskiv, Ya.S. ....	1159A	1193			

Author	Catalog(s)			
Yentis, D.J. ....	7080			
York, D.G. ....	2149	3157		
Yoshizawa, M. ....	1167	1186	1187	1188
Yoss, K.M. ....	5007	5033		
Younger, F. ....	3029B			
Younger, P.F. ....	2133			
Yungelson, V. ....	5041			
Yunnan Astronomical Obs. ....	1179	1180		
Zdanavičius, Z. ....	2093			
Zeilik, M. ....	5071			
Zumach, W. ....	2144	2145		
Zverev, M.S. ....	1082	1138		
Zwaan, K. ....	3159			

# Appendix A

## Guide to ADC Services and Products

The ADC is a group within the NSSDC that specializes in the acquisition, documentation, archiving, and distribution of machine-readable astronomical catalogs and other specialized data sets in various astronomical disciplines. Catalogs are distributed via network and physical media, such as tape, disc, and CD-ROM. The ADC exists to serve the professional astronomical community; however, amateur astronomers and educators are also welcome to use its services.

### A.1 On-line Lookup, Request, and Retrieval

The ADC On-Line Information System provides information on all catalogs held at the ADC and allows interactive submission of requests. The ADC On-Line Information System is the most frequently used method for the efficient location of astronomical catalogs of interest and in the fulfillment of requests for the data sets selected. The system is maintained under a “captive” account on the NSSDC VAX cluster called the NSSDC On-Line Data and Information Service (NODIS). Requesters may connect to the NODIS account over NSI/DECnet or Internet. For dial-up access see Appendix A.2.

To connect through NSI/DECnet, users can execute

```
SET HOST NSSDCA
```

To connect through Internet, users can execute

```
TELNET NSSDCA.GSFC.NASA.GOV or TELNET 128.183.36.23
```

Once users are connected to NSSDCA, they can enter **NODIS** in response to the **Username:** prompt; no password is required. NODIS is integrated with the NSSDC Request Activity and Name Directory (RAND). The system will ask for the user’s name and check the NSSDC requester data base for a match. If users have never requested data from NSSDC before, they should enter complete information so that any catalog requests registered later will be filled promptly and correctly.

Currently, NODIS has two display options, a window-like and textual manual display. Requesters should select their preference. On the NODIS main menu the user should select category 2, Astrophysics; choice 1, Astronomical Data Center Catalogs. Once the connection is made there will be some system messages followed by the opening menu of search options. The on-line system assumes that the user is using a VT100-compatible terminal and emits ANSI escape sequences to clear the screen.

The system has three search options: by ADC (CDS) number, by text search of abbreviated titles, and by text search of keywords. Each of these options is designed to create a list of catalogs meeting the given criteria. Catalogs are then selected from the list and information such as the full title and reference, file format description, comments, and the current distribution status is displayed. Requests can be entered interactively, and the system will guide the requester through giving the information necessary to fulfill the request. Requests for data over the network are filled by the Automated Retrieval Mail System (ARMS) on the NSSDC Data Archives and Distribution Service (NDADS). Each request is usually filled within ten minutes after the files have been requested. When the data are ready, requesters are notified by E-mail. You may then get the data by anonymous File Transfer Protocol (FTP) to host: `NDADSA.GSFC.NASA.GOV` or `128.183.36.17`, subdirectory `DATA_DIST.ADC`, or by using a default DECnet copy command for `NDADSA::ANON_DIR:[000000.DATA_DIST.ADC]`. All ADC catalog file names are preceded by the catalog number, e.g., `A1005_CATALOG.DAT`. The file names for requests will be given in the E-mail received from NDADS.

ARMS also permits researchers to rapidly retrieve selections from the current ADC NDADS holdings. The requester must know the catalog number before submitting the request. Requests are submitted via electronic mail, and the data may be retrieved via anonymous FTP or default NSI/DECnet copy. It is also possible to arrange to have the data sent directly to the requester's computer.

For more information on ARMS, users can send an electronic mail message as follows:  
Via NSI/DECnet:

```
Send to: NDADSA::ARCHIVES
Subject: SEND INFORMATION
```

Or Via Internet:

```
Send to: ARCHIVES@NDADSA.GSFC.NASA.GOV
Subject: SEND INFORMATION
```

No information is required in the body of the mail message in order to receive a reply. Please note that this is an automated service. Although the mail is monitored, staff do not normally reply to E-mail sent to ARCHIVES.

## A.2 Dial-Up Access

Users who do not have network access but who have VT-100 terminal emulation capability and a modem can dial up the NSSDC's computers and login to NODIS. The telephone number is (301) 286-9000 (country code 1) for 2400 baud access and (301) 286-4000 (country code 1) for 9600 baud

access. Once connected, users should hit return several times. At the CALL DISPLAY OR MODIFY prompt enter NCF. Once connected to NSSDC login as NODIS and follow the same instructions as in the previous section.

### A.3 Access to ADC Information Via WWW

The ADC has begun to provide access to information and services via the WWW. The Uniform Resource Locator (URL) for the main ADC WWW document is

<http://hypatia.gsfc.nasa.gov/adc.html> .

At this time items such as an article index for back issues of the *ADC Electronic News* and Telnet access to the ADC On-Line Information System are available via WWW. In the future hypertext access to catalog documentation and the catalogs themselves may be made available.

### A.4 Assistance with Catalog Requests or Information

The NSSDC Coordinated Request and User Support Office (CRUSO) provides information and assistance for ADC users via telephone, mail, and FAX. Those who need assistance may contact CRUSO using the contact information in Appendix C.

### A.5 Catalogs on CD-ROM

The ADC CD-ROM, Selected Astronomical Catalogs, Volume I, has been one of the most frequently requested data sets. It has been used by the community as a convenient compilation to make catalogs available from on-line data bases for further research. Especially searches across catalogs were made easier because the ADC CD-ROM uses consistent headers from catalog to catalog.

The ADC CD-ROM is a two-disc set containing 114 astronomical catalogs, including several significant new releases, such as the *Astrographic Catalog Reference Stars* (Corbin and Urban 1991); *IRAS Faint Source Catalog, Version 2.0* (IPAC 1990); and preliminary versions of the *General Catalog of Trigonometric Stellar Parallaxes* (van Altena et al. 1991), the *Catalog of Nearby Stars* (Gliese et al. 1991), and the *Fifth Edition of The Bright Star Catalog* (Hoffleit and Warren 1991), prepared especially for this CD-ROM release.

The catalogs appearing on the ADC CD-ROM were chosen in consultation with the astronomical data centers in China, France, the Federal Republic of Germany, Japan, and the Commonwealth of Independent States (C.I.S.). The International Astronomical Union has lent valuable support in the form of a grant to defray costs of distributing the data to small institutions in developing countries that might otherwise have difficulty in acquiring and using such large volumes of data.

Requests for this CD-ROM set may be placed using the ADC On-Line Information System (select catalog number 6906A) or may be forwarded to the NSSDC Coordinated Request and User Support Office. (See Appendix C.)

Planning for additional ADC CD-ROM catalog collections is underway.

## A.6 Quarterly Electronic Newsletter

The ADC publishes the *ADC Electronic Newsletter* four times a year in order to inform the astronomical community about new data holdings and services. Issues contain lists of the latest acquisitions, articles about ADC services, and errata for the ADC CD-ROM and other catalogs. More than 800 astronomers worldwide receive the *ADC Electronic Newsletter*.

A new subscription to the *ADC Electronic Newsletter* can be made by sending E-mail to

`LISTSERV@HYPATIA.GSFC.NASA.GOV`

In the body of the mail message (not the subject line), users should put only the following command:

`SUBSCRIBE ADCNEWS Your Name`

where “Your Name” is a full name, not a user ID or an E-mail address. The `LISTSERV` program will get the proper E-mail address for the subscription from the mail header. Once the subscription is accepted, a “welcome” message will explain how to get back issues.

Users can send subscription questions via E-mail to

`ADC-INFO@HYPATIA.GSFC.NASA.GOV`

## A.7 Archiving Data at NSSDC

The ADC accepts submission of published astronomical data for inclusion in its archives. In some cases, software can be archived as well. Appendix B describes how to submit data for archiving at the ADC.

# Appendix B

## Guidelines for the Submission of Data

For more than 15 years the international astronomical data centers have been archiving extensive tabular astronomical catalogs in digital form. In an effort to make the collection more complete, the ADC and CDS are now archiving smaller data sets as well. Astronomers who have data that would be useful for other astronomers to have in electronic form and that are extensive enough to make manual re-entry too bothersome (for example, more than one printed page of tabular material), are encouraged to submit these data to the ADC for archiving and distribution.

Adherence to the following guidelines will not only ensure that the data can be archived and made available on a timely basis but also that they conform to data structures and formats that are easily processed by future recipients of the data. The ADC has specific guidelines for the form and presentation of the data, the format table describing the data format, and the data set documentation.

### B.1 Data Media and Network Data Submission

The NSSDC can accept data in almost any physical format on a variety of media or via transmission over a network (Internet or DECnet). For large volumes of data, such as catalogs or surveys, the ADC prefers magnetic tape, which can be either 8 mm (Exabyte) cartridges or 1/2-inch 9-track open reel. Unlabeled and ANSI-labeled tapes, TAR, and VMS BACKUP storage formats are all acceptable. Smaller volumes of data can be supplied on PC or Macintosh diskettes or transmitted via an electronic network such as the Internet (via FTP) or NSI/DECnet (via COPY).

### B.2 Format and Presentation of the Data

Data that are submitted according to the following guidelines can be easily converted into FITS, or loaded into data analysis systems like the ADS. However, if in the opinion of the data provider his/her data do not warrant the extra work needed for creating the following documentation and possible reformatting, the ADC will accept data "as are" and distribute it that way. For data distribution and archiving purposes, the ADC ranks next in order of importance to the data themselves the byte-by-byte description of the data files and a brief description for on-line browsing. Full documentation is most useful for data that have not been published.

Character data should be in plain ASCII or formatted as Flexible Image Transport System (FITS) ASCII table extensions. The only binary-encoded data that the ADC can accept without question will be those formatted as FITS files. Binary data in other formats may be acceptable, but the ADC should be contacted before submitting the data, and a complete description of the data format should be provided.

If software is included, it should be in source-code form in standard Fortran 77 with no extensions or ANSI C. User documentation clearly explaining the installation and use of the program should also be included. A pure software data set should also have been published in readily accessible literature.

$\text{\TeX}$ , or preferably  $\text{\LaTeX}$ , documentation is encouraged.  $\text{\TeX}$  macro definitions and style files must be included.  $\text{\TeX}$  or  $\text{\LaTeX}$  should be avoided for typesetting large tables; straight ASCII versions of the tables should be provided instead.

Preferred file names of data submitted electronically have a maximum eight-character name and three-character extension, e.g., DATAFILE.DAT. Only alphanumeric characters plus the minus sign and the underscore are allowed. Case is not significant, thus ensuring compatibility with personal-computer and CD-ROM file naming restrictions. The extensions .fits, .tar, and .tex are being used for files in FITS format, UNIX compressed files, and  $\text{\TeX}$  or  $\text{\LaTeX}$  files.

A table describing the overall characteristics of each file, including the content of the file its record format, the record length if fixed, and the number of records contained should be provided. A descriptive table file containing a byte-by-byte explanation of each data file, as explained in the format table section below, should be included.

In the data files there should be no special carriage control characters, such as backspaces, tabs, or formfeeds, designed to produce a printed version of the catalog. For large tabular files and catalogs, which may be of use for searching or processing with user programs, the data should have a uniform fixed-field format with record length less than 512.

Accuracies and notes to the field should be made explicit in a separate field. The reason is that, once the tabular data are read into internal data arrays in integer or floating format, the roundoff information from the ASCII field is lost. Similarly, notes (like a colon, used to indicate uncertain data points) should be in a separate field.

Two identifiers for each object or one identifier and a position (with the equinox stated) should be included. For DM numbers it is desirable to indicate the catalog explicitly since rules for the catalog selection in the south vary.

For numerical fields it is desirable to express plus signs explicitly, particularly for declination. Decimal points do not need to line up in the same byte in each record but make reading the file easier. The width of the field and format type (integer, floating, or character) are required, however. In general, zero fills are helpful, particularly in positions. If no value applies, filling the field with blanks is preferred over using a "no data" indicator like "-999", unless all zero's are a possible value.

If the data are extensive and the format possibly confusing, the data provider may wish to send us

a sample (for example, 100 records) first. The ADC can then discuss possible changes to improve readability.

## B.3 The Format Table

With the following format table automatic conversions from ASCII to FITS will be possible. Data providers should provide a descriptive table file containing a byte-by-byte explanation of each data file. The explanation should give for each field in the record the byte range, the format, physical units, optional range information, optional no data flags, optional information on the ordering of the data values, and special meanings of flags and other coded symbols, etc. The format file should be in plain ASCII with blanks to separate columns.

The format table is made of five columns: the byte position, the format, the units, the label, and an explanation text. The format should conform to Fortran-77 format specifiers, or minimally indicate start byte, width of the field, and format type (A for ASCII, I for integer data and F for floating point data). Preferably, the units should conform to the rules outlined in *Astronomical Catalogues at CDS - Adopted Standards*, (See reference below.)

On the same line use the explanation column to give a brief description of the field. The explanation text may contain as the first word optional further restrictions concerning the range for numeric fields or the allowed character set for alphabetical fields, the occurrence of blank or null values, and the ordering of the values within the table. The range, null value, and sorting order are given as one word without any blanks and are discussed briefly below.

Notes explaining the field should be included in the table, if possible, following the record of byte range, format, units, label, and explanations. These notes will be useful for creating descriptions of each column automatically for systems like the Astrophysical Data System and other data base systems.

A typical format file contains the following:

Byte-per-Byte Description of File: nebula.dat

Bytes	Format	Units	Label	Explanations
2 - 4	I3	...	HBC	(1,423)!+ HBC number.
5	A1	...	NEBUL	(n) Nebulosity association flag.
6	A1	...	REMARK	(*) Remark flag.
8 - 18	A11	...	NAME	(A-Z0-9@.+ -) Star name. The star name consists of letters A-Z numbers 0-9, a + or - sign, and a . or @ sign.
20 - 56	A37	...	OTHER	Other designation.
59 - 60	I2	hour	RAh	Hours of right ascension (1950.0).
62 - 63	I2	min	RAm	Minutes of right ascension.
65 - 69	F5.2	sec	RA <sub>s</sub>	Seconds of right ascension.
71	A1	...	DE-	Sign of declination (1950.0).
72 - 73	I2	deg	DE <sub>d</sub>	Degrees of declination.
75 - 76	I2	arcmin	DE <sub>m</sub>	Minutes of declination.
78 - 81	F4.1	arcsec	DE <sub>s</sub>	Seconds of declination.
83 - 90	A8	...	REF	References to the position. References are described explicitly in a separate table.

For a numerical field a range can be specified in the format file if the explanation text starts with a round bracket "(" or ")" as in the HBC column in the above example. The opening bracket "(" is used if the lower value is included and ")" if the lower value is excluded — that is, the standard mathematical conventions apply. Both lower and upper values are not required; for instance, the specification of any value lower than 100 (100 excluded) is specified by (,100(. Writing () is acceptable when no range checking applies; this writing is required if a non-blank or a sorting order has to be specified.

For an alphabetical (i.e., A-format) field the set of the allowed characters may be specified in the format file if the explanation text starts with a bracket. Permitted characters are surrounded by brackets (), and the dash indicates a range (in the ASCII sequence); the closing bracket is accepted as a character permitted in the set if it is specified first (i.e., ()) means that only the closing bracket is acceptable), and the dash when first or last character. In the above example only *n* (or blank) is accepted in the NEBUL column and uppercase letters, digits, and the symbols @ . + - in the NAME column.

An exclamation point ! following immediately the range or character-set specification indicates that the field cannot be blank. In the above example the HBC field must be in the specified range and cannot be replaced by three blanks. If NULL is given, blanks indicate no data values are available in the field. To use another value than blanks to indicate no data values, use NULL=(value).

The order within a column can be specified with the signs:

- + indicates an increasing value in the table.
- - indicates a decreasing value in the table.
- = associated to + or - indicates that the variation is not strict; that is, the row number  $n+1$  may have a value larger than or equal to that of row  $n$  if += is specified.

**Reference:** A detailed description and rationale of the format table is given in the CDS document *Astronomical Catalogues at CDS Adopted Standards 1993*, which can be obtained via anonymous FTP to cdsarc.u-strasbg.fr in files /pub/cats/doc.tex ( $\LaTeX$ ) or /pub/cats/doc.dvi ( $\LaTeX$  processed).

## B.4 Catalog Documentation

$\LaTeX$  documentation using the ADC style file is encouraged. When using plain  $\TeX$  or your own  $\LaTeX$ , macro definitions and style files must be included.  $\TeX$  or  $\LaTeX$  should be avoided for typesetting large tables. Rather, straight ASCII versions of the tables should be provided instead.

As mentioned above, the ADC would appreciate a document to accompany the data, especially if the catalog has not been published in a generally available publication. It may be in straight ASCII or  $\LaTeX$  or preferably both. A template and a sample document will be sent on request.

The exact contents of the document will vary somewhat from one catalog to the next but the following sample sections should apply to most:

1. ABSTRACT:
2. INTRODUCTION: A brief description of the catalog, its purpose, and how it was developed. A history should be included if applicable.
3. SOURCE REFERENCE: A reference to the printed version of the catalog if it exists or to a paper giving more details about the compilation and contents of the catalog. (A copy of the paper or catalog will be appreciated. For extensive catalogs, a copy of the introduction from the paper will suffice.)
4. FILE CHARACTERISTICS AND CONTENTS: A table describing the overall characteristics of each file, including the content of the file, its record format, the record length if fixed, and the number of records contained. A table for each file giving a complete description of the format, including the units, a suggested Fortran format for reading the entry, and the nature of each entry. Details on the construction of the format table are discussed above.
5. REMARKS: Additional information of help to the user of the catalog. Either this section or the preceding one may contain additional tables such as changes between the electronic and printed version and auxiliary information. The latter might include codes used in the catalog.
6. ACKNOWLEDGMENTS:
7. REFERENCES:

## B.5 Tools to Use in Preparing Documentation

To obtain a copy of the ADC  $\LaTeX$  style file, contact the ADC or retrieve the file using FTP (user anonymous) to `hypatia.gsfc.nasa.gov`; `get /pub/adc/submit`. Data providers may also wish to examine an existing  $\LaTeX$  document. To obtain one, they should do the following. Send E-mail to `archives@ndadsa.gsfc.nasa.gov`. The subject line must read `request adc document`. In the body of the message, put `A1200`. An E-mail notification will be sent back when the document has been put in the anonymous FTP area of NDADSA. They should retrieve the example document via anonymous FTP to `ndadsa.gsfc.nasa.gov`; `get /data_dist/adc/A1200_*.doc` and `quit`. If the above procedure cannot be used, the ADC also can send data providers an example document via mail or E-mail.

## B.6 Where to Submit

To avoid overtaxing the resources of any particular data center, the ADC suggests that data providers submit their data to the center nearest them. The names and E-mail addresses of the contact points at each of the data centers is provided below.

Country	Contact Person	E-mail Address
Argentina:	Dr. Elisa Felicitas Arias	feli@fcaglp.edu.ar
China:	Prof. Li Qibin	bmabao@ica.beijing.canet.cn
France:	Dr. Michel Crézé	creze@simbad.u-strasbg.fr
Germany:	Dr. Elena Schilbach	shi@dec001.ziap.wtza-berlin.de
India:	Dr. Ajit Kembhavi	ajit%iucaa@shakti.uu.net
Japan:	Dr. Shiro Nishimura	rnishim@c1.mtk.nao.ac.jp
Russia:	Dr. Olga G. Dluzhnevskaya	olgad@airas.msk.su
U.S.A.:	Dr. Nancy Roman	roman@hypatia.gsfc.nasa.gov
	Dr. N. Paul M. Kuin	kuin@nssdc.gsfc.nasa.gov

# Appendix C

## ADC Contact Information

### C.1 General Inquiries Dealing With Catalog Requests

Requesters **WITHIN** the United States:

NSSDC Coordinated Request and User Support Office  
NASA/Goddard Space Flight Center  
Code 633.4  
Greenbelt, Maryland 20771, U.S.A.

Requesters **OUTSIDE** the United States:

World Data Center-A for Rockets and Satellites  
NASA/Goddard Space Flight Center  
Code 633  
Greenbelt, Maryland 20771, U.S.A.

For all requesters:

Internet: [REQUEST@NSSDCA.GSFC.NASA.GOV](mailto:REQUEST@NSSDCA.GSFC.NASA.GOV)  
NSI/DECnet: NSSDCA::REQUEST  
Telephone: (301) 286-6695; FAX: (301) 286-1771

## **C.2 General Inquiries on Astronomical Catalogs, Data Submission, Availability, and the ADC On-Line Information System**

Gail L. Schneider  
National Space Science Data Center  
Hughes STX  
Code 633  
NASA/Goddard Space Flight Center  
Greenbelt, Maryland 20771, U.S.A.

Internet: GAIL@NDADSA.GSFC.NASA.GOV  
NSI/DECnet: NDADSA::GAIL  
Telephone: (301) 286-8310; FAX: (301) 286-1771

## **C.3 Questions About Scientific Content of Catalogs**

N. Paul M. Kuin  
National Space Science Data Center  
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Internet: KUIN@NSSDCA.GSFC.NASA.GOV  
NSI/DECnet: NSSDCA::KUIN  
Telephone: (301) 286-0677; FAX: (301) 286-1771

Nancy G. Roman  
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Hughes STX  
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NASA/Goddard Space Flight Center  
Greenbelt, Maryland 20771, U.S.A.

Internet: ROMAN@HYPATIA.GSFC.NASA.GOV  
NSI/DECnet: NSSDCA::ROMAN  
Telephone: (301) 286-4070; FAX: (301) 286-1771

## C.4 Questions on CD-ROM Development

Lee E. Brotzman  
National Space Science Data Center  
Hughes STX  
Code 633  
NASA/Goddard Space Flight Center  
Greenbelt, Maryland 20771, U.S.A.

Internet: BROTZMAN@NDADSA.GSFC.NASA.GOV  
NSI/DECnet: NDADSA::BROTZMAN  
Telephone: (301) 441-4172; FAX: (301) 441-9486

## C.5 General Questions and Comments on ADC Services and Support

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Hughes STX  
Code 633  
NASA/Goddard Space Flight Center  
Greenbelt, Maryland 20771, U.S.A.

Internet: KUIN@NSSDCA.GSFC.NASA.GOV  
NSI/DECnet: NSSDCA::KUIN  
Telephone: (301) 286-0677; FAX: (301) 286-1771

Joseph H. King  
National Space Science Data Center/  
World Data Center-A for Rockets and Satellites  
Code 633  
NASA/Goddard Space Flight Center  
Greenbelt, Maryland 20771, U.S.A.

Internet: KING@NSSDCA.GSFC.NASA.GOV  
NSI/DECnet: NSSDCA::KING  
Telephone: (301) 286-7355; FAX: (301) 286-1771



# Appendix D

## Additional Sources of Astronomical Catalogs

The ADC is a member of an international federation of data centers. These centers routinely exchange copies of machine-readable catalogs in an effort to maintain equivalent collections. This allows each geographically-distributed center to function as the primary source for its region of the world. Outside this federation there are other institutions and organizations that maintain specialized collections of catalogs for use by research astronomers.

If the ADC does not have the particular astronomical catalog you need, readers may want to check with one or more of these other groups. This appendix lists contact information for a few of these organizations to try. The ADC is interested in maintaining an archive of the catalogs needed by astronomers. Readers are encouraged to contact the ADC and let us know about catalogs we should add to our collection. Note that some large data sets, mainly from space missions, are not archived by the ADC but by the NSSDC. These include skymaps, target lists, and some catalogs also. The NSSDC also maintains on-line data bases for locating data in its own archive or elsewhere called the NSSDC Master Catalog and the NASA Master Directory (of data).

### Several Additional Sources of Astronomical Catalogs:

American Association of Variable Star Observers (AAVSO)  
25 Birch Street  
Cambridge, Massachusetts 02138, U.S.A.  
E-mail: (Internet) AAVSO@cfa.harvard.edu

Centre de Données Astronomique de Strasbourg/SIMBAD  
11, rue de l'Université  
67000 Strasbourg, France  
E-mail: (Internet) question@SIMBAD.u-strasbg.fr  
(NSI/DECnet) SIMBAD::question  
On-line archive: via anonymous FTP to Internet node cdsarc.u-strasbg.fr  
or 130.79.128.5

Compton Gamma Ray Observatory Guest Observer Facility  
Compton Science Support Center  
Code 668.1  
NASA/Goddard Space Flight Center  
Greenbelt, Maryland 20771, U.S.A.  
On-line system: Internet node [antwrp.gsfc.nasa.gov](http://antwrp.gsfc.nasa.gov); username `gof`

University of Bologna/DIRA2  
Istituto di Radioastronomia  
Bologna, Italy  
Telephone: 39-51-243130  
On-line system DIRA2: Internet node [bodira.bo.cnr.it](http://bodira.bo.cnr.it); username DIRA2;  
password DIRA2

European Space Information System  
ESA/ESRIN  
VIA Galileo Galilei  
00044 Frascati, Italy  
Telephone: 39-6-941801  
On-line system ESIS: NSI/DECnet node ESIS; username ESIS

ESA Vilspa /IUE  
Apartado 54065  
Madrid, Spain  
Telephone: 34-1-8131100  
E-mail: (NSI/DECnet) VILSPA::IUEOBS

European Southern Observatory/Space Telescope European Coordinating Facility  
Karl Schwarzschild Straße 2  
D-8046 Garching bei München Germany  
Telephone: 49-89-320060  
On-line system STINFO or STARCAT: Internet node [stesis.hq.eso.org](http://stesis.hq.eso.org);  
NSI/DECnet node STESIS; NSI/DECnet number 29771; username STARCAT or STINFO

EUVE Archive  
Center for EUVE Astrophysics  
University of California  
2150 Kittredge Street  
Berkeley, California 94720, U.S.A.  
On-line information via anonymous FTP to [cea-ftp.cea.berkeley.edu](ftp://cea-ftp.cea.berkeley.edu)

EXOSAT Observatory  
ESTEC  
2200 AG Noordwijk, Netherlands  
Telephone: 31-1719-86555  
E-mail: (NSI/DECnet) EXOSAT::REQUEST  
On-line system: NSI/DECnet node EXOSAT; username XRAY

High Energy Astrophysics Science Archive Research Center  
Mail Code 668  
NASA/Goddard Space Flight Center  
Greenbelt, Maryland 20771, U.S.A.  
On-line system: Internet node ndadsa.gsfc.nasa.gov; NSI/DECnet node ndadsa; username xray

Infrared Processing and Analysis Center/NED  
California Institute of Technology  
IPAC 100-2  
Pasadena, California 91125, U.S.A.  
Telephone: (818) 397-9594  
On-line system NED: Internet node ned.ipac.caltech.edu; username NED

La Palma Archive  
Westerbork Synthesis Radio Telescope Archive Inventory List  
Royal Greenwich Observatory  
Madingly Road  
Cambridge CB3 0EZ, England  
Telephone: 44-223-374000  
E-mail: (Internet) LPARCH@STARLINK.ASTRONOMY.CAMBRIDGE.AC.UK  
(NSI/DECnet) STADAT::CAVAD::RALF  
On-line system ARCQUERY: Internet node gxgv.rgo.cam.ac or 131.111.69.20; username ARCQUERY

NASA Astrophysics Data System  
User Support Office  
Center for Astrophysics and Space Astronomy  
University of Colorado  
Boulder, Colorado 80309, U.S.A.  
Telephone: (303) 492-0466  
E-mail: (Internet) ads@CUADS.COLORADO.EDU

SAO Einstein Data Center/Einline/U.S.A. SIMBAD access  
Harvard-Smithsonian Center for Astrophysics  
60 Garden St.  
Cambridge, Massachusetts 02138, U.S.A.  
Telephone: (617) 495-7000  
On-line system EINLINE: Internet node Cfa204.harvard.edu or 128.103.40.204; username einline

Space Telescope Science Institute/STEIS  
STScI User Support Branch  
3700 San Marco Drive  
Baltimore, Maryland 21218, U.S.A.  
Telephone: (410) 338-4700  
E-mail: (Internet) USB@STSCIE.U  
On-line information system STEIS via anonymous FTP to STSCIE.U

Very Large Array NRAO/VLAIS  
NRAO  
P.O. Box 0  
Socorro, New Mexico 87801, U.S.A.  
Telephone: (505) 835-7000  
On-line information system VLAIS: Internet node zia.aoc.nrao.edu;  
username vlaiss



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